

ANNALS
OF THE
CARNEGIE MUSEUM

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ANNALS

OF THE

CARNEGIE MUSEUM

VOLUME II. NO. I.

EDITORIAL.

THE first part of the second volume of the Annals of the Carnegie Museum goes to press just as intelligence reaches us of the decision of the Supreme Court of Pennsylvania, which definitely settles the question of the right of the municipality to appropriate lands for park purposes, though such purchase is avowedly made with the ulterior object of placing thereon buildings such as the proposed extension of the Carnegie Institute. It is needless to say that the decision of the court has been received with unalloyed satisfaction, not merely by those who are strictly concerned with the administration of the affairs of the Institute, but by the entire population of the city. So far as is known no decision in recent years touching public matters in the city of Pittsburgh has given more profound satisfaction to the masses of the people than that which has just been rendered. When the gracious founder of the Institute conceived the idea of adding halls to the library, in which science and the arts should find fitting homes, he paved the way for adding immeasurably to the pleasures of existence in this busy metropolis of the iron industry. The citizen of to-day can scarcely realize as he looks back how he endured the conditions of life in the Pittsburgh of the past, which was a Pittsburgh, so far as the public was concerned, without books, without pictures, without a museum. The throng of those who weekly resort to the halls of the Institute, coming

and going with pleasure manifestly written upon their countenances, furnish eloquent proof in their mere numbers of the manner in which the wise forethought of Andrew Carnegie has met a human necessity. Men do not live by bread alone. There are hungerings and thirstings besides those of the mere body, and he does a great good to any community who endeavors to meet these appetencies which are more distinctively human than hunger and thirst.

After years of waiting we now hope soon to see the plans that have been formed for the extension of the Institute and thus for the extension of its power and usefulness carried into effect. It is with unfeigned pleasure that we are able to say that at last the dawn of deliverance breaks and the way is opening to that larger life for the enjoyment of which the founder has made magnificent provision. The Library will ere long have possession of the entire space occupied by the present building. The Art Gallery will have what it requires for the display of the pictures which are already possessed and which may hereafter be acquired, as well as for the annual exhibitions which have proved so important. The Museum will enter upon rooms fitted, it is hoped, for many long years to display the gradually accumulating stores of things illustrative of the forms of life and of human development and history, which make such a spot resorted to by thousands. Added to these exhibition halls will be laboratories and study rooms in which provision will be made for the prosecution of original research. Herein is the chief glory and crown of an institution of this character, that it not merely tells what man has done, but does that, which man never heretofore has done, in the way of developing a knowledge of the mysteries of the universe. It is sincerely hoped that with new and enlarged facilities the Carnegie Museum will become to a higher degree the exponent in Pittsburgh of the spirit of scientific investigation.

It is with much pleasure that we are able to continue in this number of the *Annals* the presentation of the records of the old Virginia courts which were held in southwestern Pennsylvania in the years immediately preceding the settlement of the boundary controversy between Virginia and Pennsylvania. The student of local history will find much in these records of great interest, and their preservation in printed form will no doubt be regarded as an important service to the cause of the local historian. It is hoped in the present volume of the

Annals to bring the publication of these records to completion. Many thanks are due to Mr. Boyd Crumrine for the careful manner in which he has attended to their transcription.

MR. HUGO KAHL, formerly connected with the University of Kansas and latterly with the University of Illinois has taken the place on the staff of the Museum as assistant custodian in entomology formerly held by Mr. Herbert H. Smith.

THE following *Memoirs* have issued from the press: No. 2, *Oligocene Canidae*, by J. B. Hatcher; No. 3, *The Osteology of the Steganopodes*, by R. W. Shufeldt. An elaborate Memoir upon the Classification of the Superfamily *Chalcidoidea* with descriptions of new species contained in the collections of the Carnegie Museum, has been prepared by Mr. W. H. Ashmead of the U. S. National Museum, and will be issued as *Memoir No. 4* of the Carnegie Museum. It is now passing through the press.

The paleontological explorations conducted by the Museum in Montana, Wyoming, and Nebraska have resulted in the acquisition of much new and valuable material, which will constitute the basis for a number of important papers shortly to be published.

SINCE the last number of the *Annals* was issued the Museum has acquired the entire collection of the birds of Holland made by Baron Snouckaert van Schauburg. The collection consists of mounted specimens in beautiful condition, having been mounted by ter Meer, one of the ablest of Dutch taxidermists. There are about three hundred species represented in the collection, in most cases by both sexes as well as by the young. A small collection of the birds of Costa Rica made by Mr. M. A. Carriker, Jr., has also been acquired. Among the specimens collected by Mr. Carriker are a number of rarities. Mr. W. W. Worthington is engaged in collecting the birds of Florida for the Museum.

A SYSTEMATIC effort is being made to increase the collection of minerals belonging to the Museum. Within the past month several hundreds of species not heretofore represented in the collection have been acquired. The beautiful collection of gems and gemstones pre-

sent to the Museum by Mr. J. L. Lewis has been installed and is now on exhibition.

THE Entomological Society of Western Pennsylvania, which was organized last spring, numbers over thirty members and has held regular monthly meetings at the Museum. Much interest has been developed. At present diligent work is going on in the preparation of a list of all the species of Lepidoptera known to occur in western Pennsylvania with a view to the publication of the same in the *Annals* of the Carnegie Museum.

THE botanical collections belonging to the Museum are being steadily arranged and classified. Over twenty thousand species of plants are known to be already contained in the collection.

A NUMBER of minor but important additions have been made to the collections in conchology. There are at the present time fully fifteen thousand species represented in the various collections of shells which have been acquired.

I. ASTROPECTEN? MONTANUS—A NEW STAR-FISH
FROM THE FORT BENTON; AND SOME
GEOLOGICAL NOTES.

BY EARL DOUGLASS.

In October, 1901, after finishing my collecting work for the Princeton Museum in the region of the Musselshell River in Montana, my father and myself started westward with team and camping outfit to reëxamine the Miocene deposits in the vicinity of Three Forks. We followed the Musselshell River to the source of its southern fork and passed over the divide into the valley of the South Fork of Smith River. Here, near Dorsey Station, the cream-colored nodular clays of the Deep River beds form quite high benches, while the lower benches and sage-brush flats are composed of softer material of lighter color. The latter look like the Lower White River beds as seen in other portions of western Montana; and, though no fossils were found, there is little doubt that the beds belong to this horizon. I do not think that the occurrence of White River beds has previously been noted in the Smith River valley.

From here we went southwestward, passing down the rugged, picturesque cañon of Sixteen Mile Creek. Here the Carboniferous limestones form huge walls, high pinnacles, and rugged masses, which are irregularly stained with red, giving them a fantastic appearance. The Madison division contains some fossils, as it does in nearly every place where it is exposed; though the fossils are not so abundant here as in some localities.

South of the main stream of Sixteen Mile Creek, in the foot-hills at the north end of the Bridger Range, about twenty-five miles north of Bozeman, we stopped at the house of Mr. Urquhart. Ascending a ridge composed principally of igneous material just east of the house, we found, near the top, a layer of hard, compact, gray, iron-stained rock, crowded with fossil leaves. This probably belongs to the Livingston formation.

We remained about three days in order to examine the cañon of the South Fork of Sixteen Mile Creek where Mr. Urquhart and his sons had found many fossils.

The fossils occur in dark shales and sandstones, the latter being sometimes very hard. We obtained remains of mollusca, a crustacean, and fish scales. The shells prove that the rocks belong to the Fort Benton group. The crustacean is *Linuparus canadensis*. The new star fish which is described in this paper was found by Mr. William Urquhart several years ago in these Benton beds. He showed me the place where he found it, and the matrix is like the Benton calcareous sandstone at this place ; so his remembrance of the locality of its discovery is confirmed. The strata dip at a high angle. The locality is near the intersection of the 46th parallel and the 111th meridian and is about twenty-three miles nearly due north of Bozeman.

LINUPARUS CANADENSIS (Whiteaves).

Hoploparia canadensis Whiteaves, Contrib. Canad. Pal., Vol. I., Part I., 1885, p. 87, Pl. II.

(Locality: Highwood River, a tributary of the Bow River.) Ten miles west of the first fork. Probably Fort Benton (p. 89).

Linuparus atavius Ortmann, Amer. Jour. Sci., Vol. 4, 1897, p. 290; fig. 1-3 (Niobrara?) Head of Cottonwood Creek, Mead Co., S. Dakota.

There are several specimens of different sizes indicating difference in age—three carapaces, one antennal region, one abdomen well preserved. All agree with this species in every detail except in size. Only one specimen attains the dimensions of the smallest specimen described by Ortmann.

The Dakota specimen was obtained from Mr. H. F. Wells. The horizon is somewhat doubtful, though he thought it to be Niobrara. There is some doubt also concerning the Canada specimens.

ASTROPECTEN? MONTANUS, sp. nov.

The type consists of an impression in the hard calcareous sandstone. Since it is only an impression its anatomical characters can only partially be made out.

Size small; arms five, narrow and gradually tapering, longer than diameter of body; five radial elliptical figures on body, all except one nearly in line with the long axis of the arms. The most prominent markings are the pits which probably represent the marginal plates. It is possible however that these may be impressions of the ambulacra. Half way from the base to the end of the arm each row of pits is nearly

as wide as the middle portion of the arm. Only one arm is complete. This has twelve pits on each side and they are opposite. From the central pit to end of perfect arm 12 mm. From central pit to margin of body between the arms 3.5 mm.

It was said by those who saw it when first obtained to have possessed little markings on the margins of the arms. The rock was used for years as a step near the door and if these were present they have been wholly worn away.

The rock is a hard, fine-grained calcareous sandstone, greenish-gray in color and weathering to brown on the surface.

Below are given determinations of the accompanying fossils and notes which were both kindly furnished by Dr. A. E. Ortmann. They are of interest as determining the horizon of the beds and showing the fauna of the Fort Benton near the eastern portion of the mountain region, since much of the Cretaceous of this region has been found to be poor in fossils.

INOCERAMUS UNDABUNDUS Meek and Hayden (?).

Stanton, Bull. U. S. Geol. Surv., 106, 1893, p. 84, pl. 6, figs. 1, 2.
(Fort Benton. Upper Missouri Region.)

Five casts; smaller than type, but outline and character of sculpture similar; the undulations, however, are a little more crowded, which may be due to the younger age of our specimens.

PINNA LAKESI White (?).

White, 12th Ann. Rep. U. S. Geol. and Geog. Surv. of Terr., Part I., 1883, p. 17, pl. 11, fig. 1.

Ridge sixteen miles west of Greeley, Colorado. (Fort Pierre.)

Reported from South Fork of Old Man River, Canada, by Whitcaves. Contrib. Can. Pal., Vol. I., part 1, 1885, p. 84. Apparently Fort Benton (p. 89).

One fragment compared with the type agrees well, but is smaller and more compressed, sculpture identical.

PHOLADOMYA PAPYRACEA Meek & Hayden (?).

Stanton, Bull. U. S. Geol. Surv., 106, p. 116, pl. 26, p. 1.

Fort Benton group. Upper Missouri region.

Three specimens (both valves).



FIG. 1. *Astropecten? montanus* Douglass. (No. 601.)
Natural size.

The identification remains doubtful. Our individuals correspond to this species in sculpture, but they are longer and thicker. Stanton mentions specimens from Montana that are much larger than the type.

SCHLOENBACHIA SHOSHONENSIS (Meek).

Mortoniceras shoshonensis Meek, Rep. U. S. Geol. Surv. Terr., Vol. 9, 1876, p. 449, pl. 6, figs. 3 and 6.

Stanton, Bull. U. S. Geol. Surv., 106, 1893, p. 179, pl. 44, figs. 1 and 2.

Fort Benton, of Wyoming.

One fragment hardly larger than the one figured by Meek, but evidently the same character of sculpture.

SCAPHITES VENTRICOSUS Meek & Hayden.

U. S. Geol. Surv. Terr., Vol. 9, 1876, p. 425, pl. 6, figs. 7 and 8.

Stanton, Bull. U. S. Geol. Surv., 106, 1893, p. 186, pl. 44, figs. 8-10, pl. 45. (Fort Benton of Upper Missouri region.)

One complete individual of about the size of that figured by Stanton in pl. 44, fig. 10, and agreeing with it exactly in the external characters (sculpture).

Indeterminable casts of bivalves, *Ostrea*? *Exogyra*, *Cucullæa*, and gasteropods (*Turritella*?).

NOTE. The specimens above described are in the Princeton collection with the exception of *Astropecten*? *montanus* which is in the Carnegie Museum.

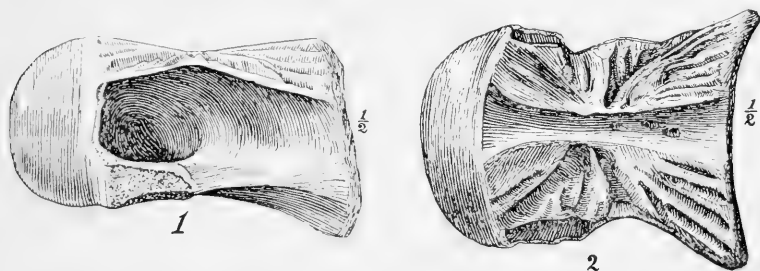
CARNEGIE MUSEUM,

October 6, 1902.

II. DISCOVERY OF REMAINS OF ASTRODON (PLEUROCÆLUS) IN THE ATLANTOSAURUS BEDS OF WYOMING.

By J. B. HATCHER.

While engaged during the season of 1901 in collecting dinosaur remains in the Atlantosaurus beds on Sheep Creek, Albany Co., Wyoming, Mr. C. W. Gilmore discovered two vertebral centra (No. 578), which I am unable to distinguish either generically or specifically from those described and figured by the late Professor Marsh as pertaining to *Pleurocælus nanus*, which, as will be shown later, should be regarded as a synonym of *Astrodon johnstoni* Leidy.



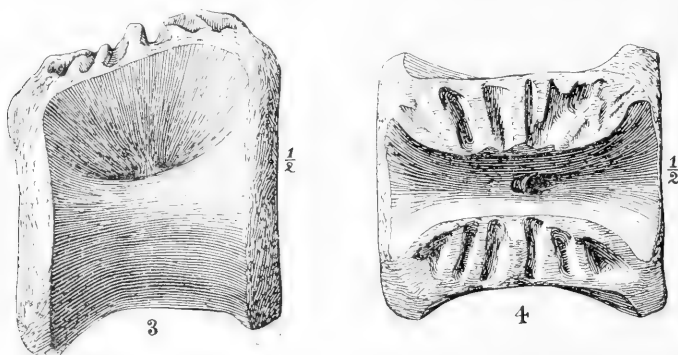
FIGS. 1 and 2. Cervical centrum of *Astrodon johnstoni* Leidy, seen from left side and above; one half natural size. (No. 578.)

One of these centra, lateral and superior views of which are shown in Figs. 1 and 2, I regard as pertaining to a posterior cervical. Its sides are deeply excavated in such manner that the body of the centrum is reduced throughout its middle region to superior and inferior horizontal plates connected by a thin median vertical lamina. The neural canal was small and much constricted medially. The centrum is strongly opisthocœlous and the transverse diameter is greater than the perpendicular. It agrees almost perfectly in size and general characters with the cervical centrum of *Astrodon (Pleurocælus) nanus* figured by Marsh in his *Dinosaurs of North America*¹, except that in

¹ Sixteenth Ann. Rep. U. S. G. S., Pt. 1, Pl. XL.

the present specimen the facet for the cervical rib is broken away, thus giving to this region a somewhat different aspect.

The centrum shown in Figs. 3 and 4 I regard as pertaining to the last dorsal. The posterior extremity is moderately concave, and the anterior slightly so. The lateral cavities are deep, though not so pronounced as in the cervical; that on the left side is decidedly deeper than the one on the right. The neural canal was much larger than in the cervical and at about its middle there is a deep pit giving origin to two small foramina which no doubt served for the transmission of nutrient blood vessels to the interior of the bone. The vertebral cen-

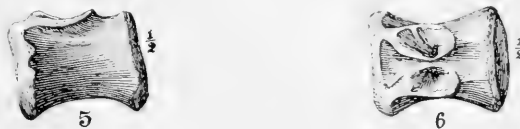


FIGS. 3 and 4. Centrum of last ? dorsal seen from left side and above. (No. 578.) One half natural size.

trum described by Marsh as a posterior dorsal and figured in plate XL., Figs. 4 and 5, of his *Dinosaurs of North America*, in reality pertained to an anterior dorsal, as is evidenced by its strongly opisthocœlian character and the more extended pleurocentral cavities, while the dorsal centrum figured in the text as pertaining to *Pleurocœlus* was from the mid-dorsal region, as is evidenced by its less decided opisthocœlian nature and smaller lateral cavities.

In Figs. 5 and 6 are shown lateral and superior views of a posterior caudal centrum, pertaining to about the same region as that figured by Marsh in plate XL., figs. 8 and 9, of his *Dinosaurs of North America*, from a specimen found in the Potomac beds of Maryland. The present specimen was found by Mr. Gilmore in the *Atlantosaurus* beds, on Sheep Creek, Wyo., but in a different quarry from that which furnished the dorsal and cervical centra figured above.

A careful comparison of these remains with those figured by Marsh as pertaining to *Pleurocalus nanus*, based on material discovered by the present writer in the Potomac beds of Maryland, will, I think, show it to be quite impossible to definitely distinguish these remains either generically or specifically from the latter. The same may be said of



FIGS. 5 and 6. Lateral and superior views of centrum of distal caudal. (No. 585.) One half natural size.

the material upon which was based Marsh's description of *Pleurocalus montanus*. These western forms may, however, be specifically distinct from the Maryland species.

SYNONYMY OF *PLEUROCÆLUS NANUS* MARSH AND *ASTRODON* *JOHNSTONI* LEIDY.

It now remains to discuss the synonymy of the above-mentioned genera and species.

The generic name of *Astrodon* was given without description in the *American Journal of Dental Science*, 1859, by Dr. Christopher Johnston to certain reptilian teeth obtained by a Mr. Tyson from a bed of iron ore near Bladensburg, Maryland.

In 1865,² as *Astrodon johnstoni*, Dr. Leidy fully described and figured these teeth, thus placing the genus on a valid foundation. A comparison of Dr. Leidy's figures of the teeth of *Astrodon johnstoni* with Marsh's figures of *Pleurocalus nanus* will show a very striking similarity between the two, which is rendered all the more striking by an actual comparison of the specimens themselves. Moreover since I myself collected all of the material described and figured by Professor Marsh I can assert that it likewise was found in a bed of iron ore near Bladensburg, Maryland. The exact locality of the Marsh material was certain iron ore mines on the farm of Mr. Wm. Coffin, and especially in that one locally known as "Swampoodle" and situated about one and one half miles northeast of Beltsville on the Baltimore and Ohio Railway, some thirteen miles from Washington. Since these remains

² Memoir on the extinct Reptiles of the Cretaceous formations of the United States, Smith, Contr. to Knowl., Vol. 14, Pl. XIII, figs. 20-23.

were found in essentially, and perhaps identically, the same locality and horizon, and, in consideration of the very great similarity which they exhibit, there appears no good reason for considering them as pertaining to either different genera or species. *Astrodon johnstoni* Leidy having priority should therefore be retained, while *Pleurocælus nanus* would become a synonym of that genus and species.

RELATIONS OF *ASTRODON JOHNSTONI* LEIDY (*PLEUROCÆLUS NANUS* MARSH) AND *ELOSaurus* PARVUS PETERSON AND GILMORE TO OTHER GENERA OF JURASSIC SAUROPOD DINOSAURS.

It will have been noticed no doubt that the character of the remains which have been referred to the above-mentioned genera and species indicates that they pertain to animals not yet fully adult. This is shown by the sutural connections exhibited between the centra and neural arches of the various vertebræ; by the free coracoid in *Elosaurus*; and by the character of such portions of the skull of *Astrodon* as have been recovered. While collecting in the Potomac beds I secured a number of fragments of skulls pertaining to both upper and lower jaws. Whenever teeth were present they invariably belonged to the first series and were not yet fully erupted, the points of the crowns scarcely rising above the borders of the jaw, showing conclusively that the animal had not yet reached the adult stage. Some of the larger limb bones from Maryland described by Professor Marsh as *Pleurocælus altus*³ may perhaps have pertained to fully adult individuals, but unfortunately only the tibia and one or two other fragmentary limb bones of this is known. Now it would seem somewhat remarkable that only immature specimens of these animals should have been secured while for the most part only fully adult representatives of such genera as *Diplodocus*, *Morosaurus*, *Brontosaurus*, etc., are known from the same deposits. Since these last-mentioned genera must have been represented by young and immature individuals it does not seem at all improbable that some of the remains which have been referred to *Pleurocælus*, *Astrodon*, or *Elosaurus* may in reality belong to the young of some of these genera of the larger *sauropoda*. From what we know of the cervicals and dorsals of *Astrodon* (*Pleurocælus*) they might very well have belonged to a young specimen of *Brontosaurus*, as might also the detached teeth figured by both Leidy and Marsh; while the fragment of a jaw figured by Marsh

³ *Am. Journ. Sci.*, Vol. XXXV, 1888, p. 92.

in plate XL. of his *Dinosaurs of North America* as pertaining to *Pleurocaelus nanus* agrees very well, except in size, with a similar fragment of *Brontosaurus* figured in plate XX. If one compares the detached teeth of *Brontosaurus* and *Astrodon* (*Pleurocaelus*) as shown by Marsh respectively on plates XX. and XL. of his *Dinosaurs of North America*, he cannot but be impressed with the remarkable similarity which they exhibit. While it is true that some of the remains described by Professor Marsh as pertaining to *Astrodon* (*Pleurocaelus*) could not possibly have belonged to a young Brontosaur, it is equally true that the association of this material is purely conjectural. No two bones or fragments of all that material collected from the Potomac beds in Maryland were found in such relation to one another as to demonstrate that they had belonged to the same individual. In any discussion as to the affinities of these various genera and species of small sauropod dinosaurs, not only the immature nature of the remains upon which they have been based, but also the scattered and disarticulated state in which they were found, must be constantly borne in mind. With the possible exception of *Elosaurus parvus* it remains to be shown that any of these forms are not the young of some of the well-known larger forms, and most of the known remains of this last-mentioned genus resemble very closely in many important details like parts of the skeleton of *Morosaurus*, as has been pointed out by Peterson and Gilmore in their original description.

The discovery of these remains of *Astrodon* in the Jurassic deposits of Wyoming is of the greatest importance as furnishing additional evidence in favor of the reference of these two widely separated deposits to one and the same geological horizon as was originally suggested by Marsh. Should future discoveries demonstrate that any one, or all of these smaller sauropods, are but immature representatives of the larger forms, the evidence in favor of this correlation will be strengthened rather than weakened. Marsh has reported remains of *Astrodon* (*Pleurocaelus*) from the Jurassic deposits near Havre in Normandy, while the type of *Astrodon* (*Pleurocaelus*) *suffosus* was derived from the Kimmeridge of Swindon, England. It is evident therefore that these dinosaurs had a very wide geographical distribution and that while the European forms may belong to different species than the American they nevertheless furnish important evidence as to the relative age of the European and American deposits. Since the Kimmeridge clays are of undoubted Jurassic age, and considering the simi-

larity existing between the dinosaur remains of that formation and those of the Potomac and Atlantosaurus beds, the age of the two latter would seem to be not more recent than Jurassic.

CARNEGIE MUSEUM,

October 23, 1902.

III. OSTEOLOGY OF THE LIMICOLÆ.

BY DR. R. W. SHUFELDT.

INTRODUCTION.

Two or three years ago I gathered together into one memoir a number of papers I had published on the limicoline birds since 1883, digesting, as well as augmenting, the material thus collected. Subsequently I went over this entire MS. again, improving it in many ways and adding many new facts, which I had obtained as a result of my studies of more extended series of skeletons of this group. Finally, at the present writing, that is the last part of September, 1902, the entire monograph has been carefully gone over again, and largely remodeled, and this entailed a copying of many pages of the work — a task cheerfully performed for me by my wife Alfild, to whom my thanks are due. As the paper now stands, it is probably the most extensive contribution to the osteology and taxonomy of the *Limicolæ* that has appeared from the pen of any writer on the subject up to the present time. With this brief prefatory history I pass at once to the consideration of the results of my researches in the osteology of the forms contained in this suborder.

ON THE OSTEOLOGY OF THE LIMICOLINE BIRDS, WITH VIEWS UPON THEIR CLASSIFICATION.

It was Professor Alfred Newton who said under the article "Plover" in the ninth edition of the *Encyclopædia Britannica* (Vol. XIX., p. 228) that "Though the various forms here spoken of as Plovers are almost certainly closely allied, they must be regarded as constituting a very indefinite group, for hardly any strong line of demarcation can be drawn between them and the Sandpipers and Snipes. United, however, with both of the latter, under the name *Limicolæ*, after the method approved by the most recent systematists, the whole form an assemblage, the compactness of which no observant ornithologist can hesitate to admit, even if he be not inclined to treat as its nearest relations the Bustards on the one hand and the *Gaviæ* on the other, as before suggested." This is quite in harmony with my own views in the premises,

and I believe with Professor Newton that it meets the ideas of the majority of systematists, and I may add, what is more important, the ideas of most avian morphologists.

Of the *Limicolæ*, this great suborder of birds, widely known as the "plover-snipe" group, and in the main constituting the Charadriomorphæ of Professor Huxley (P. Z. S. 1867, p. 457), Coues has said, that "Most of the families of this order are well represented in this country, and will be found fully characterized beyond. The position of *Parridæ* is in question, and it probably belongs here rather than among the families where it is ranged [*Alectorides*]. There are several outlying or inosculating families in the vicinity of *Limicolæ* and *Alectorides*, of uncertain position. The largest of these is the Bustard family, *Otididæ*, which connects *Limicolæ* and *Alectorides* so perfectly, that its position has long wavered between these two orders; the balance of evidence favors its reference to the latter. The typical families are *Charadriidæ* and *Scolopacidæ*." ("Key" 2d ed., pp. 596, 597.)

In these remarks Coues says nothing about his having placed the Herodiones between the Limicolæ and the Alectorides in the work cited, which he has done, and his remarkable classification of the latter group is too well known to call for any comment here.

Professor Max Fürbringer in his great work upon the Morphology of Birds arranges the *Limicolæ* in the following manner.

O. Charadriornithes (Ægialornithes).	S. O. CHARADRIIFORMES.	G. S. LAT. LARO-LIMICOLÆ.	G. S. STR. CHARADRII.	{ F. Charadriidæ. F. s. str. Glareolidæ. F. s. str. Dromadidæ. F. Chionididæ. F. Laridæ. F. Alcidæ. F. Thinocoridæ. F. Parridæ. { F. Cedicnemidæ. F. Otididæ.
		G. PARRÆ. G. OTIDES.		

Dr. R. Bowdler Sharpe in his "Hand List of Birds" (1899) considers them as an Order, (XV.), CHARADRIIFORMES, and places them between the LARIFORMES, (Order XIV.) and the GRUIFORMES, (Order XVI.). He divides the Charadriiformes into no less than seven Suborders, namely the Chionides, the Attagides, the Charadrii, the Parræ, the Cursorii, the Cedicnemi, and the Otides, and these names will sufficiently indicate the families of birds this author considers to

belong to the limicoline assemblage — everything in fact from a Sheath-bill to a Bustard.

The author's views on the position of the Limicolæ are presented with a discussion of their affinities at the close of the present Memoir.

More or less typical limicoline birds are found in nearly all parts of world, and they are particularly well represented in the avifauna of the United States. So that the full description of their osteology given beyond will thoroughly characterize the group as a whole.

Much has been written on the subject of their skeletology, and of this I have availed myself. My own writings, published for a number of years in the *Journal of Anatomy of London*, the *Journal of Morphology* and elsewhere, illustrated by many plates and figures, have already set forth the osteological characters of the American *Limicolæ* quite exhaustively. This work will be used to the fullest extent here, and thoroughly revised. In dealing with the *Aphrizidæ*, as I remark further on, I have only employed my monograph in the *Journal of Morphology* to the extent of using the facts set forth in it, and not incorporated it here as a whole.

My private cabinets afford the skeletons of many American limicoline forms, and these have been handsomely supplemented by the loan of many others from the collections of the U. S. National Museum, and from still others from the collection of Mr. F. A. Lucas. Professor Alfred Newton has also sent me for my inspection several specimens from the Museum at Cambridge, England, and others from his own collection. These very well illustrate points in the osteology of *Scolopax rusticola*, *Pavoncella pugnax*, *Vanellus vanellus* and others, for all which my thanks are here tendered. Others have also sent me useful material and it is referred to later.

Osteology of the Phalaropes.

(Complete skeletons of *Crymophilus fulicarius* and *Phalaropus lobatus* examined.)

Phalaropes have a skull of much the same general form as we find it among the Sandpipers, the narrow and extended superior mandible being considerably larger than the cranium, while the very open structure of the latter gives it a peculiarly delicate appearance. Upon severe maceration the premaxillary does not appear to come away, and detach itself, as it does in most *Tringæ*, and it is rather more spread out laterally than it is in those birds. The narial vacuities are

long, open slits, and there is no osseous septum narium. Phalaropes are typically schizorhinal birds, and their skulls are characterized by having a deep longitudinal median depression over the region of the cranio-facial axis, upon either side of which the upper portion of the small lacrymal is prominently tipped up. Below, this bone sends down a thread-like osseous limb, which bending smartly backwards, fuses by its posterior extremity with the upper and outer angle of the rather large and quadrilateral pars plana. Nasal bones and the zygomæ are straight and very slender. On the superior aspect of the cranium, the frontal region is seen to be extremely narrow between the superior margins of the orbits; the fronto-parietal region is rounded and smooth. Further back there is a fairly well marked superoccipital prominence, which in the Red Phalarope is pierced upon either side by a foramen, which is not the case in *P. lobatus*. Both the anterior wall of the brain-case and the interorbital septum are very deficient in bone. Into the last open space there is thrown backwards from the posterior margin of the mesethmoid a free, horizontal, and very slender spur of bone. On the lateral aspect of the skull we find the post-frontal and squamosal processes, especially the latter, to be inconspicuous spinelets of bone. At the base of the cranium the foramen magnum is large and of a cordate outline; the basitemporal region beyond it being somewhat contracted.

The pterygoids are short, small, and vertically compressed, and they articulate, as in all true limicoline birds, with the basi-ptyergoid processes of the sphenoid. Their palatine heads are separated in the middle line as are the palatines for much of their length behind. These latter bones have extremely narrow prepalatine portions, widely apart anteriorly, and *below* the naso-maxillary junction fusing with the maxillo-palatine plate, upon either side. Posteriorly, their postero-external angles are rounded off, while their descending internal and external margins are prominent and keel-like. In the middle line in front they merge to form a spiculiform point, which coössifies with the broadish, thin, lamellar vomer, which latter terminates in a free blunt apex anteriorly.

Either maxillo-palatine is of an oval outline, scroll-like and lamelliform in structure, with a great perforation existing in it, which absorbs its entire central portion, leaving barely more than the rim of the bone. These maxillo-palatine processes are well separated from each other in the middle space, and they neither of them come in contact with any of the adjacent bones, as the vomer, or palatines.

This plan of structure is, as we know, what Huxley has termed the schizognathous type, and it is characteristic, as we have seen, of the first three suborders of birds treated in former memoirs, as it is of several others.

A quadrate bone in one of these Phalaropes is very pneumatic, as is indeed most of the rest of the skull, and it has a *double* mastoidal head, with a conspicuous orbital process, and a small internal mandibular facette, separated by a valley from a larger oblique external one upon its same aspect. The bony meatus of the ear is very open, and in *P. lobatus* permits a view along the entire length of the eustachian tube to its anterior exit.

In the eyeballs the sclerotal plates are small, and the bones of the hyoidean arches are slender.

Long and of an acutely V-shaped pattern, the mandible has comparatively rather an extensive symphysis, and from it behind, in the median line, may project directly backwards a delicate spine. Either ramus is rather shallow in the vertical direction, and is pierced by a slit-like "ramal vacuity," exposing the presence of the splenial element of the jaw. The angular processes are lamellar in structure, and inclined somewhat to hook upwards. They are by no means inconspicuous in *P. lobatus*.

With respect to the characters of the remainder of the skeleton, they may well be seen in a specimen of the species I have just named. I find twenty-one free vertebræ in its spinal column before arriving at the pelvis. Counting from the skull, the fourteenth vertebra supports a pair of tiny free ribs, while those on the fifteenth are considerably longer, though they do not reach the sternum, there being no costal ribs for them. There are six pairs of true vertebral ribs, all being very delicately constructed, as are their long slender unciform processes. The hæmapophyses of the one pair of pelvic ribs do not reach the sternum, and there is a tiny "floating" pair of the former kind behind them.

The dorsal vertebræ fit very closely together in their articulations, and their metapophyses are notably long.

The *pelvis* is a very thin, light, and open structure. Anteriorly, the iliac margins are rounded off in front, and these bones do not meet over the crista of the sacrum. The parial foramina, two rows upon either side of the middle line of the bone, are large and open among the lateral processes of the fused vertebræ of the sacrum, lending to the pelvis a peculiarly frail appearance, already noted above. At the

lateral aspect we find the rather extensive obturator space separated by bone from the foramen of the same name. Behind, the post-pubic style is long drawn out and drooping upon either side, and the posterior *foot* of the ischium, which is applied to the superior margin of the same, is notably long and slender. Upon the nether side we find but one pair of the lateral processes of the sacral vertebræ, thrown out, modified, and lengthened to act as braces opposite the acetabulæ. There appear to be *seven* free vertebræ in the skeleton of the tail, and to these is to be added a squarish and rather large pygostyle.

The *sternum* of *P. lobatus* (as well as other species of the genus) has essentially the same pattern as the sternum of any typical Plover, as for instance *C. squatarola*. Its carina is ample, with the carinal angle in front rather prominent and jutting, which in some degree is caused by the concavity of the anterior border of the keel. Posteriorly the sternal body is twice notched upon either side, while the manubrium is small, and the costal processes triangular, broadish, but not particularly high.

Os furcula of the shoulder-girdle is of the U-pattern, being much bowed to the front, and with a small hypocleidium below. Either free clavicular extremity develops near its pointed end upon its outer aspect a shoulder, supporting a small facet for articulation with the head of the corresponding coracoid. When articulated *in situ*, this pointed extremity rides well over the clavicular process of the scapula, being at the same time in contact with it.

The *coracoids* are short, but not especially stout, the shaft being straight with its sternal extremity much expanded. Here we find three processes, so often to be observed among the water birds at large. Of these, one is at either extremity of the sternal facet of articulation, and the other is a conspicuous lateral one, triangular, and lamelliform, being almost exactly as we find it in *Aphriza* and other types.

The blade of the *scapula* is somewhat expanded for its posterior moiety, and its apex is truncated obliquely from within outwards and backwards. Its way of articulation with the *os furcula* has already been described above.

Phalaropes have non-pneumatic limb-bones throughout. The *humerus* is long, and its shaft is nearly straight. At the proximal end the ulnar crest is prominent and overshadows an extensive concavity; the radial crest is not nearly so well developed. Distally above the oblique tubercle an epicondylar process juts out, and indeed the whole

bone has much the form of the humerus as seen in *Charadrius dominicus*. The *radius* and *ulna* present nothing very peculiar, and the latter is but little bowed along the continuity of its shaft. The row of ribs for the secondary quill-butts are present.

The distal phalanx of the index digit is long and slender, and the expanded portion of the proximal generally exhibits two small perforations, as in the *Laridae*. The index and medius metacarpal are nearly straight, the latter being very slender.

Passing to the *pelvic limb* we find the short, straight *femur* to possess a length just equal to half the length of the *tibio-tarsus*. Its head is sessile on the shaft, and the trochanter is moderately raised above the articular summit of the bone. In the tibio-tarsus the cnemial crests are conspicuous, especially the inner one, and in fact they almost exactly resemble in form those parts in miniature, as we observe them in a Fulmar. The lower part of the *fibula* is of hair-like dimensions. The hypotarsial process of the *tarso-metatarsus* is small and subcubical in form, being both pierced and grooved for tendons. The accessory metatarsal is suspended above the distal trochleæ, and the hallux digit is small and feeble. As to the other toes, their basal joints are the longest in any case, and they gradually diminish in length as we proceed in the direction of the terminal ungules.

Comparative Osteology of the Plovers.

(Skeletons of representative species of the genera *Vanellus*, *Charadrius* and *Ægialitis* examined.)

A number of years ago in my article on the osteology of *Æ. montana*, a bird at that time designated by American ornithologists as *Podasocys montanus*, I remarked that "there has always been something strikingly columbine to me in the outward appearance of a plover's head—a similitude that is by no means shaken when we come to examine the prepared skull, in which so many of the bones are arranged as they are in the cranium and face of a pigeon." The skull of *Æ. montana* is extremely light and fragile, due to the access of air to numerous cells in certain parts of its interior, and likewise to a generous supply of diploë in other localities. I find in the chick of the plover only a few days old, that the premaxillæ have thoroughly coalesced along the culmen of the beak for its outer or anterior third, but the suture dividing them posteriorly along the nasal process of these

bones is, at this tender age, distinctly visible, whereas all the sutures in the face become obliterated in the adult.¹

Posteriorly along its dentary border the premaxillary throws backwards two processes, each of which articulates by squamous sutures; the first and longer, the maxillary, with the maxillary bone; the second, or shorter, the palatine process of the premaxilla, with the palatine. This arrangement is found in all of our plovers. Several foramina are seen on the sides of the culmen beyond the anterior border of the nostril.

The *nasals* have each a broad expansion in front of the frontals, where they articulate with each other along the median line as far forwards as the nasal process of the premaxilla; here they contract and dip under that bone on either side, conforming themselves to its width and form, still so as to articulate with each other beneath it, as far forwards as the prolongation of the premaxillary, where they slightly diverge from each other, to terminate in pointed extremities. Posteriorly, the nasals throw down, obliquely forwards, straight bars of bone, which bound the osseous nostrils behind, to be carried forwards over the maxillæ on either side, to the maxillary process of the premaxilla, where they articulate by squamous sutures beneath the bone.

This arrangement of the nasals is very much as we find it in the pigeon (*C. livia*); and, as in the pigeon, the aperture forming the bony nostril is long and very open. Both are schizorhinal birds. The mesethmoid extends well forwards in the plovers, thus affording above a spreading table for the frontals, nasals, and premaxilla to rest upon.

The *lacrymals* in *Vanellus* and *Ægialitis* are not very large bones, and in the adult they ankylose with the anterior margins of the frontals, where they form the rounded anterior terminating margins of the orbital peripheries. In *C. squatarola* this part of a lacrymal is more jutting and conspicuous, owing to the fact that the anterior foramen of the supraorbital gland is in that species converted into a deep, rounded notch. In *Æ. montana*, a lacrymal sends down an attenuated process that fuses with the outer margin of the antorbital plate, or lateral mass of the mesethmoid. From this margin the lacrymal develops two spine-like processes, which project forwards, the upper one being the longer, the lower one almost touching the maxillo-jugal bar. These spine-like processes are absent in *Vanellus*, and very much

¹ As I transcribe these remarks from my memoir in the *Journal of Anatomy* I amplify them by the use of the more extensive material now at hand.

aborted in the Killdeer Plover, where the descending process of the lacrymal is much broader and fuses more completely with the pars plana.

Varying in size in the different species, the pars plana long remains cartilaginous in the plovers, but eventually becomes a quadrate osseous partition, quite effectually separating the orbit from the rhinal chamber. An irregular foramen for the passage of the nerves always occurs above it, being very large in *Charadrius*, owing to the comparatively smaller size of its antorbital plate.

The *vomer* of the Mountain Plover is an extremely delicate and elongated bone; in front it runs out into a free and needle-like point, while posteriorly it is bifurcated so as to articulate with the palatine upon either side. It glides freely beneath the anterior pointed end of the rostrum.

Turning our attention to the *palatine* bone, we find that on either aspect it forms the osseous roof of the mouth by sending forwards a tapering prepalatine to ankylose with the maxillary and premaxillary at their junction. The postpalatine portion of the palatine is expanded, and it is separated from the fellow of the opposite side in front, where the inner margin dips down to form the "internal lamina" of the palatine bone. Outwardly the bone is produced still further down to form the "external lamina." The pterygoidal processes of the palatines are in contact with each other, while the "ascending processes" articulate with the forks of the vomer as already pointed out above. The maxillo-palatines are elegant scroll-like laminæ of bone, often perforated by a few foramina. Posteriorly, they do not normally come in contact with the palatines on either hand, or with the vomer above them. Anteriorly each bone has two processes; one, the stouter, connecting it with the palatine; the other, much more slender, with the maxillary, while between the two a circular foramen is thus produced.

In all our Plovers the *zygoma* is a very straight bar of bone, and somewhat slender in its proportions.

The superior periphery of an orbit, formed by the frontal and nasal of the corresponding side, is uniformly tilted upwards all along its continuity. Within this raised orbital rim, upon either side, we find the well-marked depressions for the supra-orbital glands, pierced along their bases by minute foramina, the largest perforation being at the anterior end. In *C. squatarola* these glandular depressions pass be-

yond the osseous orbital border in front, the gland, during life, resting there upon the tissues that overlie the eyeball superiorly.

This tilting up of the superior orbital borders is best marked in the curious skull of *E. semipalmata*, where it offers a very striking feature. In it, too, the supra-orbital glandular depressions are very distinct, and

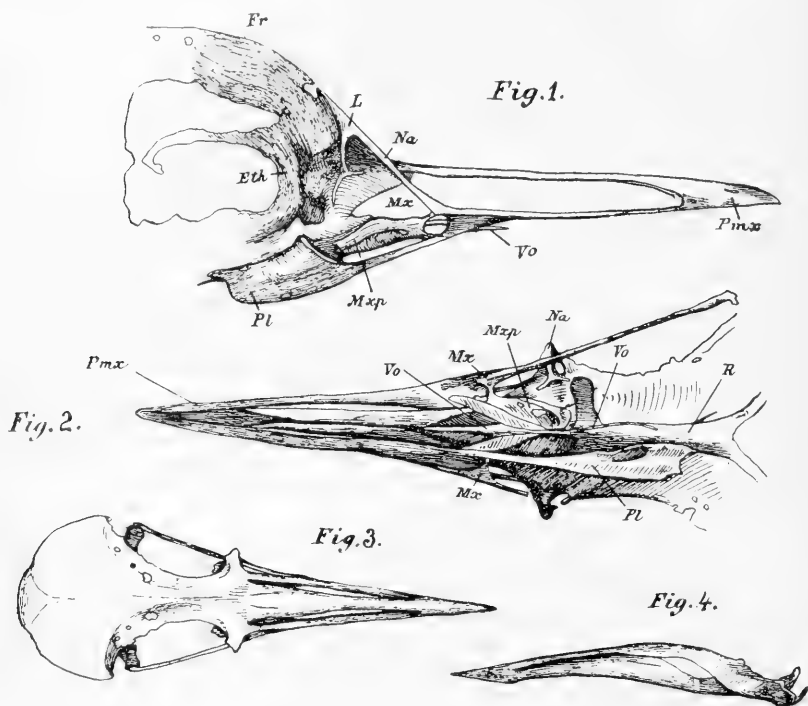


FIG. 1. A side view of the forepart of the skull of *Charadrius plumbeus* enlarged, *Mx*, maxillary; *Mxp*, maxillo-palatine; *Pl*, palatine; *Na*, nasal; *Fr*, frontal; *Eth*, ethmoid; *L*, lacrymal; *Pmx*, premaxillary. (After Huxley.)

FIG. 2. Under view of the same (*C. plumbeus*) partially dissected and enlarged. (After Huxley.)

FIG. 3. Skull of *Charadrius squatarola*; superior view. (Spec. 7963, Coll. U. S. Nat. Mus.)

FIG. 4. Left lateral view of the mandible of *Charadrius squatarola*. Natural size. Figs. 3 and 4 drawn by the author.

they each terminate anteriorly in a single, large subcircular foramen, situated well within the external edge of the orbit.

The fronto-parietal vault of the cranium is very smooth and rounded

externally, and is very thin in *Æ. montana* — thicker in the Golden Plover. A large vacuity absorbs almost entirely the interorbital septum below, merging with the foramen rotundum behind. Separated by an osseous horizontal lamina, there exists above this another large vacuity, the forward extension of the foramina for the first pair of cranial nerves, which are greatly increased in size.

At the back of the cranium there is a fairly well pronounced supra-occipital prominence pierced upon either side by an oval foramen.

In examining the base of the cranium in a young chick of the Killdeer Plover (*Æ. vocifera*) I observe that the bony bridge that lies between the supra-occipital foramina is formed by the supra-occipital itself; it is cleft above at this stage, and stouter lateral masses are seen on either side of it. The basi-temporal is still distinct as an element, as are the ex- and basi-occipitals. At the side we find that the squamosal sends upwards an ascending process, long and slender, which overlaps the posterior third of the rounded margin of the frontal, and itself makes the periphery of the orbit. This bone below develops a "zygomatic process," marked by a semicircular nick at its extremity, which arches over the articulation for the quadrate. In adults a sphenotic process is fully developed. The occipital condyle is small and circular, with the notochordal notch nearly obliterated.

With respect to the *quadrate*, it is peculiar only in having its processes and shaft much compressed and plate-like. The orbital spur, making up nearly half the bone, is a quadrilateral lamina, with its base applied to the entire length of the body of the shaft of the quadrate proper. A long narrow condyle surmounts the otic process, placed at right angles to this orbital offshoot, and the pit for the quadrato-jugal occupies the summit of the outstanding lateral mandibular process. Rather undue shortening takes place in the shaft of a pterygoid, owing to the far backward reach of the palatine and the great size, on the other hand, of the quadrate. Basi-ptyergoidal processes are present and articulate with facettes at the base of the sphenoidal rostrum.

The hyoidean arches are very delicately constructed, but present nothing peculiar; they are described for other limicoline birds beyond.

The mandibular elements fuse together early in all true plovers, and in the chick the ramal fenestra is not obvious, whereas, as the bird matures, a small slit-like opening makes its appearance.

The posterior angular processes of the lower jaw are recurved

spines of bone slender in comparison with the rather massive inturned angular processes, each of which is pierced near its apex with the pneumatic foramen, seen in so many of the class. The rami of the mandible of this mountain plover make a very acute angle with each other, and the upper margins are quite sharp, while they are rounded inferiorly. Ossifications of the organs of special sense, as the eye and ear, present nothing but their usual ornithic characters.

Of the Axial Skeleton. — Twelve vertebræ, including the atlas and axis, are found in the spinal column of the neck of all of our plovers. The cup of the atlas is roundly notched behind to its center, and the axis possesses a knob-like neural spine. In the third vertebra this process becomes a small compressed square lamina, and in this segment, too, we find an extensive quadrate hypapophysis below, and a minute foramen on either side, in the bony plate joining the zygapophyses. These features reappear in the fourth vertebra, but the foramen mentioned has so increased in size here that it is reduced to a mere inter-zygapophysial bar. In the fifth, sixth, seventh and eighth, the neural spine has disappeared; the hypapophysial plates are longer and shallower; the parapophyses persist as parial and at the same time lateral spines, directed posteriorly. The last four vertebræ of the twelve under consideration are modified for the carotid canal. Upon them the neural plates are suppressed. These four vertebræ are the longest in the neck, and their post-zygapophyses, diverging from each other, reach well backwards. In several respects the thirteenth and fourteenth vertebræ are peculiar, and differ from the leading twelve cervicals. They are broader, wider, and each supports a pair of free ribs with well-developed tubercula and capitula; the second pair, or those on the fourteenth vertebra, may bear uncinatè processes, situated low down on the rib. The neural spines are still suppressed, but the hypopophyses again make their appearance mesiad and beneath the centra; in the thirteenth it consists of a single plate, while in the fourteenth a lateral offshoot springs from each side of this, so that three lamelli-form prongs are present in that segment. A deep pit, with overhanging brim on each side of the centrum, is for the first time observed in these two vertebræ as we descend the series. It becomes wider and shallower as we pass through the vertebræ beyond, but does not disappear until we pass to those united to form the sacrum.

The succeeding six vertebræ, or the fifteenth to the twentieth inclusive, are all free, and all support true vertebral ribs that articulate

with the sternum by the means of costal ribs or hæmapophyses. The neural spine is well pronounced in the first (fifteenth) of this series, but in the remaining five it is a lofty median crest, each interlocking, before and behind, at the angles at the summit, in a schindylesial articulation. Transverse processes stand out horizontally from these vertebræ, and needle-like metapophyses connect them in several instances, though they do not quite meet in every case. The fifteenth and sixteenth vertebræ retain the hypapophysial processes, being triple in the former, while in the latter it becomes single again, long and triangular. In the remaining four it is entirely absent. The vertebral ribs are quite slender, and all support long unciform processes, which in the adult articulate with their posterior borders; the costal ribs become longer as we proceed backward in the direction of the pelvis.

There are twelve vertebræ in the pelvic sacrum, and from this compound bone, during ordinary maceration, the true bones of the pelvic

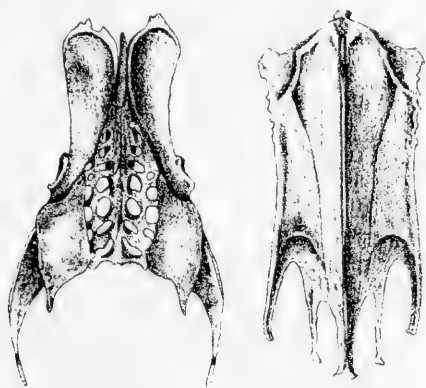


FIG. 5. Pelvis of *Charadrius dominicus*, viewed from above; natural size (Specimen No. 16,715; Collection of the Smithsonian Institution. Collected by the Point Barrow Expedition of 1882 in Alaska). By the author.

FIG. 6. Sternum of *Charadrius dominicus*, pectoral aspect; natural size. By the author, from the same specimen which furnished the pelvis for Fig. 5.

girdle are easily detached. The first four sacral vertebræ throw out their lateral processes as abutments against the nether sides of the spreading ilia; and above, these last-named bones meet the sacral crista but not each other across it. There is a pair of slender pelvic ribs, but their hæmapophyses fail to reach the costal borders of the sternum. They articulate with the hinder borders of the last pair that do. The

next five following sacral vertebræ are compressed from above downwards, allowing for a swell in the neural canal within, which is to accommodate that enlargement which here takes place in the myelon. The ninth sacral vertebra has its transverse processes strengthened and lengthened to act as sustaining abutments opposite the acetabulæ. To still further insure strength, the outer ends of these processes are vertically expanded.

Four rows of interapophysial foramina, two upon either side of the sacrum, constitute one of the main features of the pelvis of a plover, when we come to regard it upon its dorsal aspect.

Either post-pubic style is of nearly uniform caliber, and is produced considerably beyond the ischia behind. The posterior extremity of either ischium is produced, long and pointed, and rests during the life of the bird, against the upper surface of the post-pubic style. Mergence of the obturator space and the small obturator foramen may or may not take place. It even may vary for the same species or be different on the two sides of the same pelvis. I must note here that in a pelvis of a Killdeer Plover before me the ilia do not meet the sacral crista; that character does not go for much, however. Including the pygo-style, from seven to eight vertebræ make up the skeleton of the tail in Plovers. I find eight in *Æ. vocifera*, and seven in *Æ. montana*. *Vanellus* also has eight. Probably specimens of the Mountain Plover will eventually come to hand having eight of them, also.

Coming next to the *sternum* and *shoulder-girdle*, I find the entire apparatus to be non-pneumatic in nature. No foramina are to be observed.

The *os furcula* is the perfect miniature of that bone as it occurs in much larger birds of the present suborder, *Numenius longirostris*, for instance. The clavicular limbs are of uniform thickness throughout, and only very slightly increased in bulk where they unite, mesiad and below, to support a small quadrilateral hypocleidium. Substantially, the method of articulation of the shoulder-girdle bones with each other is the same as we found it among the Phalaropes. The form of the coracoid is almost identically the same in *Æ. vocifera* and *Phalaropus lobatus* and there is very little difference in the shape of the scapulæ — either species having the bone fully twice as long as the *shaft* of a coracoid; and in *Æ. montana* its blade is curved, broad, and rounded at its posterior extremity. It reaches well back towards the ilium, overlapping the ribs.

The manubrium of the *sternum* is a stumpy process, shaped like a wedge, being notched above and sharp below. Above this process the coracoidal grooves nearly meet at a point in the mesial plane at its base, while the lateral processes of the same name, of a triangular form, rise only to a moderate degree above the superior margin of the bone, to bear along the posterior border of either one, the facettes for the costal ribs, six on each side.

The xiphoidal extremity of the body of the sternum of *Æ. montana* is four-notched, the notches being deep, and giving rise to five processes, a median one, the under surface of which supports the hinder part of the carina, and a pair on each side of it. In *Vanellus* the inner pair of perforations are subelliptical foramina and not notches.



FIG. 7. Pelvis of *Charadrius dominicus*, right lateral view. Natural size (Spec. 16715 Coll. U. S. Nat. Mus.).

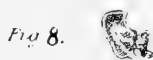


FIG. 8. Pygostyle and last caudal vertebra of *Charadrius dominicus*; right lateral view. Natural size. Same specimen.

In the sternum of a Killdeer Plover at my hand (*Æ. vocifera*) the inner notch on the right-hand side is also converted into a foramen. *C. squatarola* has them as in *Æ. montana*. Viewed laterally the sternum of a Plover very closely resembles that bone as we see it in *Aphriza virgata*; indeed, in so far as shape is concerned, irrespective of mere size, this bone is of a very uniform pattern throughout the majority of our typical *Limicolæ*—the Woodcock, (*Philohela*,) and Wilson's Snipe, (*Gallinago*,) being conspicuous departures therefrom.

Ossification in Plovers is normally extended, as in so many other birds, to the plate of the superior larynx, the rings of the trachea, and a few tendons and sesamoids.

Of the Appendicular Skeleton.—The chief point of interest that attaches to the limbs of our Plovers is that they are, in every case, absolutely non-pneumatic, both the pectoral and pelvic extremities presenting, in all the bones that compose them, those characters, after maceration, so well described by Hunter.¹ The long bones are also non-pneumatic in *Gallinago* and *Philohela*, which are other birds of

¹ Observations on the Animal Economy, Palmer's ed., 8vo, 1837, p. 178.

not very dissimilar volatorial habits. All the bones of the limbs in Plovers are impressed with the more usual ornithic characters.

In the *humerus* we find the proximal extremity well expanded, and a strongly marked, curling crest overshadowing the usual site of the pneumatic foramen in birds where it is present. The "preaxial ridge" is shorter than we usually find it, that is, it does not extend so far down the shaft; this shortening, however, is not accompanied by any diminution in the height of this ridge.

The humeral shaft is straight and subcylindrical on section; its distal extremity supports the usual points for examination, and the epicondylod spur is well developed. (See Fig. 9.)

Both *radius* and *ulna* are moderately bowed along the continuity of their shafts, and the row of *quill-butts* are ranged along that of the



FIG. 9. Left humerus of *Charadrius dominicus*, palmar aspect; natural size; by the author, from specimen 16,715 of the Smithsonian Collection (taken at Point Barrow, Alaskan Expedition of 1882).

latter. There are a dozen of these in *Vanellus*. The skeleton of the hand in any true Plover is a long one, and in *C. squatarola* that segment is fully as long as the skeleton of the antibrachium. The pollex has one joint, the next digit two, and the last, one; there are no claws or spurs in the manus of these birds, as seen in some of the Asiatic forms. There is a very remarkable resemblance of the skeleton of the pectoral extremity of a Plover to the corresponding structures in a Gull. (Compare for instance *L. delawarensis* and *C. squatarola*.)

The entire length of the skeletal arm of *Æ. montana* measures 14 centimeters — of which the humerus takes 4.4; the ulna 4.6; the carpus 0.2; the metacarpus 2.3; and the two phalanges of index digit 2.5.

In the *femur* we notice that the head is sessile on the shaft, and placed nearly at right angles to it; on its upper surface the pit for the ligamentum teres is seen.

The crest of the great trochanter is sharp and elevated above the general surface of the summit of the shaft. At the distal end, the outer or larger condyle falls but a little below the inner one, the groove for the head of the fibula being well cut into it.

Of the two processes on the anterior aspect of the head of the *tibio-*

tarsus, the inner one is of a broad quadrilateral form inclined outwardly, while the external one is a rounded, claw-like, and sharp process, curving downwards. The usual osseous bridgelet for the confinement of tendons is seen in front just above the condyles.

The *fibula* is a very delicate spicula of bone, reaching down, in the articulated skeleton, only half way to the external condyle.

The *hypotarsal protuberance* of the *tarso-metatarsus* is in reality converted into two processes, so deep is the tendinal grooving down its posterior aspect. In *Æ. montana* the inner process is the larger, and sends from its lower portion a sharp ridge of bone that is carried down on the shaft and gradually merges with it. The pits to receive the condyles of the tibio-tarsus on the superior aspect of the head of the tarso-metatarsus are deep, and a knob-like apophysis arises between them on the anterior boundary. Just below this a fossa exists, at the base of which a foramen is seen, which pierces the shaft from before backwards, coming out behind to the inner side of the larger process of the hypotarsus. In all our plovers the shaft of this bone of the leg is long and straight, and the mid-trochlea projects well beyond its fellow on either side. The usual foramen is seen just above its base and on the outer side.

Among our plovers it is only in *C. squatarola* and in *Vanellus* that we find a small hallucial joint present, hung rather high on the shaft of the tarso-metatarsus. It is altogether absent in the Killdeer and others. Otherwise the podal joints are normal, both in arrangement and character, so far as the three anterior digits are concerned.

Measuring from the summit of the trochanteric crest of the femur, on a straight line to the apex of the claw of the mid-digit in the skeleton of the leg in *Æ. montana*, we find it to be in the adult male, 15.5 centimeters in length. Of this the femur takes 3.0, the tibio-tarsus 5.6, the metatarsus 4.2, and the mid-digit 2.7 centimeters.

With respect to its skeleton, no true Plover will depart in any marked degree from the pluvialine skeletal characters as they have been set forth in the above account.

On the Comparative Osteology of Numenius longirostris.

Curlews agree with all other true limicoline types in being typically schizorhinal birds. (See Fig. 10.)

In the skull the *nasal* bones are arranged and formed much as they are in the Phalaropes, but without an immature specimen, which I am



FIG. 10. Right lateral view of the skull of *Xymenius longirostris*, with mandible attached : natural size, *sf*, supraoccipital foramen ; *q*, quadrate ; *pl*, palatine ; *i*, jugal ; *pl*, palatine ; *i*, point of meeting of nasal (*u*) and maxillary ; *h*, subnasal bar (formed by premaxillary) ; *h*, premaxillary ; *n*, nasal ; *l*, lacrymal ; *eth*, ethmoidal wing (*pars plana*).

sorry to say I lack, it is impossible to tell how far forwards beneath the culmen, and on the inner sides of the premaxillary the nasals are extended. We have just seen above that they reach almost to the tip of the beak in Plovers. •

The *premaxillary* is quite broad and subcompressed as it slopes somewhat gently away from the frontal region of the skull between the nasal bones. It becomes gradually narrower as it proceeds towards the distal tip, but alters but little in form. In an old individual of *N. longirostris*, it is nearly six times as long as the remainder of the skull, twice as long as the corresponding parts in *N. borealis*. Other forms graduate between these two; in *N. arquata* it is fully four times as long, and is more generally curved throughout.

At the point marked *i* in Fig. 10, and in *B* of Fig. 11, the nasal meets the maxillary. Beneath, and a little beyond this point, the palatine also merges with these bones. These elements thus unite to form a common rod that contracts immediately after the union to a delicately fashioned stem to which I have given the name of the subnasal bar. They are seen on either side of the nasal process of the premaxillary, at first beneath the osseous narial slit, then to pass under this bone, becoming at the same time flatter, more closely applied for the entire length, until they merge into it near the tip at *k*, Fig. 10. In *N. longirostris* these bones may be pulled away from the other part of the premaxillary, as shown by the dotted lines in Fig. 11, *A*, and they spring back to their original position when the hold is released.

This is only possible in those curlews that have very long bills. It is not a particularly noticeable feature in the Eskimo Curlew, nor the whimbrel. The sutures among these bones are completely obliterated in the adult skull, so it is not possible to tell the precise limits of the several ones entering into the composition of this bar; no doubt the dentary or maxillary process of the premaxillary takes a large share. The delicate curling crest of bone found just within the nasal bar above, and united with the rounded outer margin of the premaxillary, belongs to the nasal of that side.

In *N. hudsonicus* this character is absent, while, on the other hand, it is exaggerated in *N. borealis*, in which bird the entire rhinal chamber seems to be filled with this enlarged bone, here forming a hollow sub-cylinder, which meets a similar cylindrical formation of the maxillo-palatine coming from below. (Compare *c* and *d*, Fig. 12.)

We find the vomer to be a very well developed bone in *N. lon-*

girostris. It is a thin spearhead-shaped lamina of bone, pointed in front, bifurcated behind, where either fork fuses with the ascending process of the corresponding palatine. On the under side of this horizontally disposed vomer there is a thin, vertical, median crest, which in front merges into the free pointed extremity, while posteriorly it is produced backwards by two vertical plates which grasp and ride upon the rostrum. These latter are the bifurcations to which I have just alluded. In *N. hudsonicus* and *N. phaeopus* the anterior tip of the

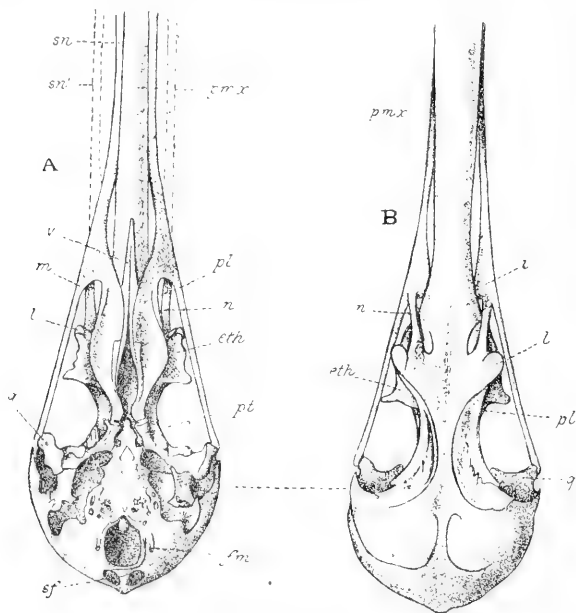


FIG. 11. Basal and superior views of the skull of *Numenius longirostris*, natural size; A, the basal view, lower mandible removed; B, the superior view, like lettering designating like parts. *pmx*, premaxillary; *v*, vomer; *pl*, palatine; *m*, maxillary; *n*, nasal; *eth*, lateral wing of ethmoid; *l*, lacrymal; *q*, quadrate; *pt*, pterygoid; *fm*, foramen magnum; *sf*, supra-occipital foramen; also in A, *sn*, the subnasal bar, and *sn'* its position in dotted lines as drawn away from the premaxillary on either side. In B, *i*, the point of meeting of nasal and maxillary.

vomer is bifurcated. As a rule the maxillo-palatines are not as much curled as we find them in the Plovers, and the union with the palatine is more extensive. As in the Plovers, however, they are riddled with perforating foramina; more frequently the foramina in either maxillo-palatine plate merge into two regularly suboval ones.

The postpalatine portion of the *palatine* is broadish with its lamina and process strongly developed. These bones are well separated from each other beneath the rostrum, and the pterygoid process is turned outwards. Taken in proportion to the size of the bird, the prepalatine portion of the palatine is relatively shorter in *N. longirostris* than in any other species, while *N. hudsonicus* and *N. phæopus*, with their comparatively longer crania, have that portion of the palatine correspondingly lengthened out.

The *lacrymal*, though small, stands out quite prominently at the antero-superior orbital border. It articulates largely with the nasal, and in all curlews sends down a slender bony style which unites with the upper and outer angle of the *pars plana*, by which means a large foramen in this locality is encircled. These ethmoidal wings have the same general appearance in all the members of the genus. Each one is a quadrilateral plate, projecting nearly at right angles from the mesethmoid, to form an ample partition between the rhinal and orbital cavities.

The interorbital septum is never entire in any of the true curlews, but is pierced in almost identically the same manner in every species. The forms of these interorbital vacuities can best be seen by referring to the several lateral views of the skulls illustrating this memoir. But one specimen of the skull of *N. hudsonicus* lies before me, and in that the dividing bar between the two openings is evidently broken out. I have restored it by dotted lines (Fig. 12, *C*). The *pterygoids* are comparatively short bones in all the curlews, more particularly so in our present subject. They are twisted and angular in appearance, with sharp longitudinal edges. An elliptical facet occupies the middle of the inner aspect of each, which articulates with the basisphenoid process on either side.

Each *quadrate bone* presents the usual undulatory surface upon its mandibular head for articulation with the lower jaw. Just above this, on the inner aspect, is a small, semiglobular facet for the cup on the outer end of the pterygoid. The orbital process is a quadrate, lamelliform plate with truncate extremity, while *two* articulating facets are seen to occupy the dilated end of the mastoid process of the bone. On the outer side we find the usual cotyle for the projection on the quadratojugal. The form of the quadrate varies but very little among the other representatives of this genus.

Several foramina are seen at the base of the deep sunken cavity from which the fifth pair of nerves issue. This is the case in all the spe-

cies, and this elliptical pit on the posterior wall of the orbit, just above the quadrate, is quite a striking feature of the skull. Ossification is so far deficient in the interorbital septum opposite the exit for the optic nerves that this aperture is here one large circular opening. To its outer side, however, separate and minute circular foramina exist for the third pair. This latter condition seems to be common to all the species. The olfactory nerve in the anterior part of each orbit has for its reception a well-marked canal that leads to a foramen (*N. longirostris*), or a notch (*N. phæopus*), into the rhinal chamber. A side view of the skull presents for examination, in addition to other points already noticed, the osseous entrance to the ear, which is here shielded behind by a rather prominent tympanic wing. The sphenotic process in all curlews, except *N. borealis*, is a long, sharp-pointed spine, and even in the excepted species it may become quite long in old birds.

An upper and lower spine project forward from the squamosal, over the articulation for the quadrate. This feature is more prominent in the continental species, *N. arquata*, than in any of our American forms of curlews, though it is by no means entirely absent on the lateral aspect of the skull of *N. longirostris*.

In the eye the usual sclerotal plates are found; they are comparatively small and about twenty in number. The superior aspects of curlew skulls offer some very diverse characters. In all the cranio-facial region is concave and traversed by a faint longitudinal median groove that becomes lost beyond on the premaxilla. This groove is deepest in *N. arquata*. In *N. longirostris* the superior orbital peripheries are but slightly serrated, and the orbital roof just within them is pierced by but very few minute foramina.

The "glandular depressions" are shallow. The surface between them is depressed, though the inner margins or boundaries of these depressions are somewhat raised and prominent. These margins, in *N. phæopus*, merge into a single median ridge or crest; the orbital rims are decidedly serrated with small incomplete foraminal perforations, and the glandular depressions would hardly attract attention.

The raised median line is single and still more prominent in *N. arquata*, causing the depressions to appear more concave. In my specimen one large foramen is seen close to the orbital rim on one side, situated rather posteriorly, with a corresponding notch on the opposite side. In *N. hudsonicus* the orbital rims are comparatively

smooth; no evidences exist of the glandular depression, and the region is barely concave; a minute foramen exists on each side posteriorly. *Numenius borealis* has strongly marked glandular depressions of a semilunar form, situated just within the smooth orbital peripheries. A decided median groove divides them longitudinally, which in that species is continued on the culminar portion of the premaxilla for a short distance. The glandular depressions terminate anteriorly in this curlew, in a notch, on either side, just behind the lacrymal bones. The parietal region is smooth and globular, being impressed in most of the species by a longitudinal median groove, most noticeable in *N. arquata*, less so in *N. borealis*, least of all in *N. phaeopus*. Among the chief points of interest in the basal view is the form of the foramen magnum. This is nearly circular in *N. longirostris* and *N. arquata*; cordate in *N. phaeopus*.

The condyle is small and hemispherical in all the species, and has situated beyond and on either side of it, the usual vascular and nervous foramina seen in this locality in ordinary birds' skulls.

Two large supraoccipital foramina, of elliptical outline, exist in our present subject and in *N. arcuata*; these openings are very small in the Whimbrel, and exist only on one side in *N. borealis*, as a minute perforation.

The surrounding muscular line of the occiput is quite strongly marked in all the species; least of all in the Eskimo Curlew.

Within the brain-case we find the tentorial ridges quite prominent, well dividing the various encephalic compartments. The longitudinal one appears to be ungrooved by the sinus.

Foraminal openings occur in the usual localities for the entrance or exit of nerves and vessels. But little diplöic tissue seems to be deposited between the tubular walls of the cranial vault, these latter being quite thin, and composed of firm, compact bone.

The curvature of the *mandible* is almost identical with that of the upper bill or premaxillary. When articulated with the skull it is found to be in all the species a few millimeters shorter than the latter bone. In *N. longirostris* the rami separate and diverge from each other at a point about midway between tip and articular extremity. Beyond this point the mandible is in one piece, rounded beneath and with rounded lateral angles above. A groove deeply marks the bone along its entire course in this portion, in the median line. The rami still remain rounded for some distance backwards after they separate from each

other, but, just before they arrive at the long slit-like ramal vacuity, they dilate to become lamelliform plates compressed from side to side. The upper borders of these plates curve inwards towards each other. A second small circular foramen, situated at the base of a larger concavity, on the outer aspect of the ramus, between the vacuity and the hinder end, exists in all the specimens before me, except *N. hudsonicus*.

The articular ends are of a form most common to all ordinary birds of the present suborder; they are produced posteriorly into small vertical plates that turn outwards, but do not curve upwards to any great extent, thus differing from what we found in the Plovers. The usual pneumatic foramina are found at the inturned apices of the articu-

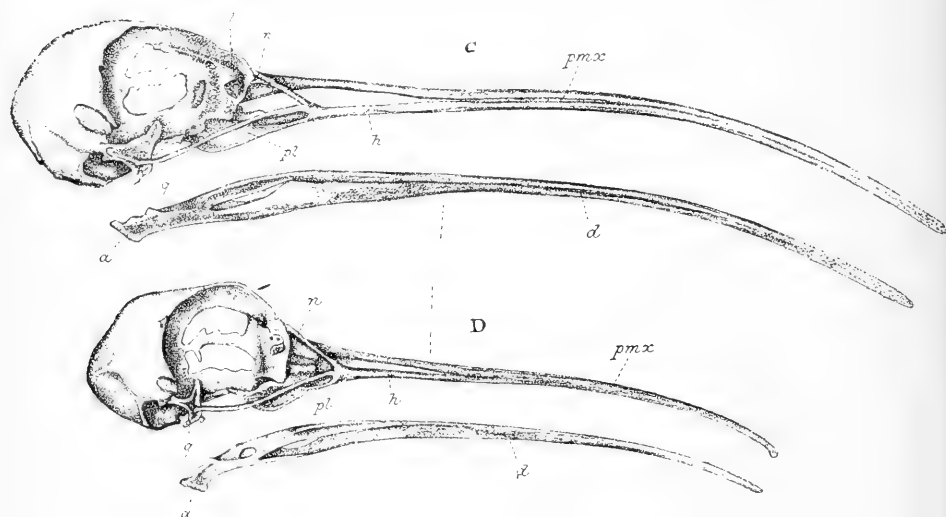


FIG. 12. Right lateral views of the skulls of *Numenius hudsonicus* (C, the upper figure), and *N. borealis* (D, the lower one). Natural size. *pmx*, the premaxillary; *n*, the nasal; *h*, the lacrymal; *q*, the quadrate; *pl*, palatine; *a*, articular; *d*, dentary; *h*, the subnasal bar.

lar cups. The sutures defining the limits of the bones that originally entered into the composition of the mandible in any of this genus, have become almost entirely obliterated, the edge of the dentary alone sometimes being persistent.

With the exception that the *ceratohyals* have fused with the *glossohyal*, or the posterior part of it, as is usual among birds, all the remaining elements of the *hyobranchial apparatus* of the curlew remain free

during life. The first piece of the arch, just named, has the form of a long arrow-head, with quite a sizable fenestra towards its hinder end. This is the inter-cerato-hyal fenestra. The first basi-branchial has a median longitudinal ridge above, connecting the two enlarged articulating extremities; the posterior one has two facets for a cerato-branchial element on each side. These are long and slender, curving upwards. They support the equally delicate epibranchials, which terminate in filaments of cartilage. The second basibranchial is quite short, comparatively speaking, it being in turn produced backwards by a slender, cartilaginous tip.

It will be seen from this description, as far as I have carried it, how really very much alike is the skull of a Plover and the skull of a Curlew.

Comparative Notes from the Skulls of other Limicoline Birds.—Although the skull of *Himantopus mexicanus*, the Black-necked Stilt, has most of the usual limicoline characters, its general form is quite different from that of the skull of either a Plover or a Curlew. Viewed superiorly, we find the median crease very deep between the orbits, and the glandular depressions on either side of it are semilunar in form, strongly stamped and definite in outline. The convexities are directed towards each other.¹ Each terminates anteriorly in a single foramen, that pierces the roof of the orbit beside the lacrymal bone. The inter-orbital septum of this Black-necked Stilt is markedly deficient in bone, and the anterior wall of the cranium does not fare much better in this respect (see Fig. 13). Supra-occipital foramina of the most usual form are found in this bird also, the muscular lines of the occiput being well defined above them. The *pars plana* of either side is but feebly developed, and the descending spine of the lacrymal falls far short of reaching this bony projection of the mesethmoid. Upon basal view we find the palatines long and narrow, with the vomer slender, and terminating in a sharp point anteriorly. The hinder end of each articular part of the mandible in *Himantopus* has the appearance of being scooped out, so as to form a semiluniform cavity.

Recurvirostra americana.—Several of the characters presented on the part of the skull of *Himantopus* are substantially reproduced in the case of the Avocet. Chief among these is the form assumed by the proximal ends of the mandible, the extreme narrowness of either *pars plana*, and the free-hanging descending limb of either lacrymal,

¹ The present specimen may be defective. It was prepared at U. S. Army Med. Museum before I had charge.

though the superior part of each of these bones projects much further from the skull than it does in the Stilt. The Avocet also differs from *Himantopus* in having a more perfect interorbital septum; in the supra-occipital foramina being circular; in the vomer being broad and widely forked at its expanded anterior extremity; in the shallower supra-orbital depressions, which in the Avocet merge together in the middle line, and are carried out on the projecting lacrymals. It is scarcely necessary to call attention to the difference in the form of the skeleton of the bills in these two birds. The Avocet stands alone with his upturned mandibles, and even the beak of the Stilt is quite unique.

The Skull in the Woodcocks, and in Gallinago. — Although essentially limicoline in their general character, the skulls of *Scolopax rusticola*, *Philohela minor* and *Gallinago delicata*, and no doubt others of those genera, depart in some very striking particulars from the limicoline skulls we have thus far considered in this paper. Except in point of size there is scarcely any difference between the skulls of the European¹ and American Woodcocks, the former being about one fourth larger.

In the former the great, capacious and circular orbits, with their raised superior borders, have crowded the greater part of the brain-case downwards and forwards, thus bringing the foramen magnum into the horizontal plane, and the other parts of the skull have the appearance of being moved to the front. All this is also seen in *Gallinago*, but not quite to such a marked degree. In the Snipe, also, the orbits are more elliptical in outline (Fig. 13, F), and the median, longitudinal crease between them on the superior aspect of the skull, more pronounced. Both Snipes and Woodcocks have the occipital condyle very small and hemispherical in form; it being sessile in the former, but rather inclined to be pedunculated in the latter. The supra-occipital prominence is well seen in *S. rusticola*, in which species the foramina, one upon either side, are absent, though they are generally found in the American Woodcock, and always in *Gallinago*. Of a cordate outline, the foramen magnum is of large size in these birds, being as wide in *S. rusticola* as the basitemporal area in front of it. An osseous septum narium exists in all the birds, being most complete in the Snipe. It

¹ I use the specimen kindly loaned me by Prof. A. Newton, F.R.S. (No. 308) from the cabinets of the zoölogical collection (osteological department) of the University of Cambridge, England.

is very peculiar in the woodcock, for from a median lamelliform plate between the nostrils it gradually swells beneath the culmen as it passes to the front of those apertures, then again soon contracts to merge with the narrow and flattened median process of the premaxillary, near the juncture of the anterior and middle thirds of this part of the bill. Below this point the dentary processes of the premaxillary are thin and horizontally flattened. In front of this again the mandible becomes solid, being only grooved in the middle line upon

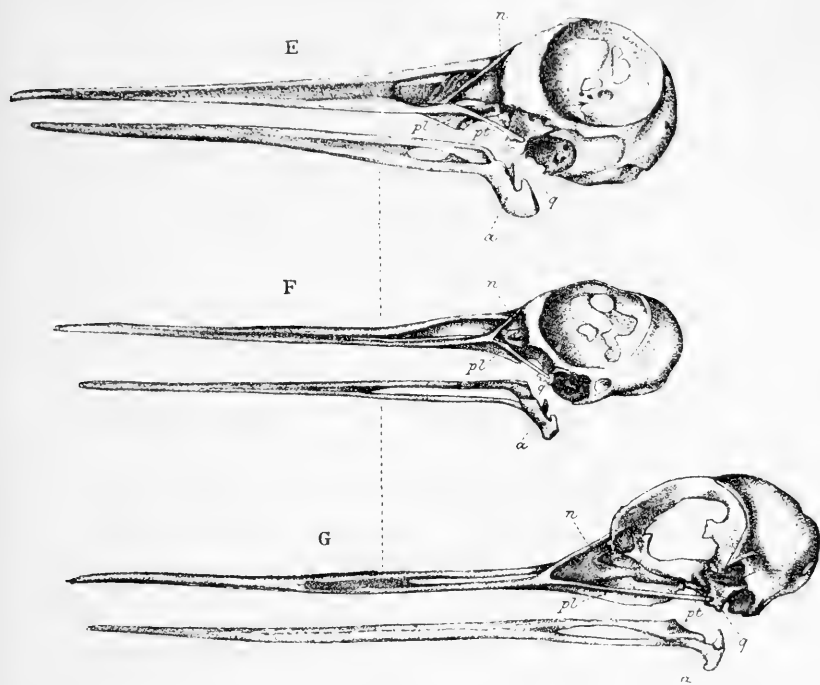


FIG. 13. Left lateral views, natural size, of skulls of *Philohela minor* (E), *Gallinago wilsoni* (F), and *Himantopus mexicanus*, (G). *n*, nasal; *pl*, palatine; *pt*, pterygoid; *q*, quadrate, and *a*, articular.

its nether aspect. Now from this plan of structure we have in this straight superior mandible of the woodcock a section about a centimeter long, which from the thinness of the bones is quite flexible in the vertical direction, the continuity of the osseous beak both in front and behind this section being much firmer and stronger. This feature, if anything, is still better marked in the snipe. It is well known that

the woodcock and snipe have the ability to curve up the anterior extremity of the upper bill, and so far as the skull in these birds is concerned the power to perform such a feat is quite apparent.

Passing to the cranio-frontal region, we are to note the large *lacrymal* which sweeps backwards to join with the post-frontal, thus completing the orbital periphery in bone, a very rare condition, as we know, in birds.

In the Woodcock the plate-like *vomer* is vertically disposed, but at the same time it is exceedingly small, being drawn out in front to a point of absolute hair-like dimensions. It is horizontal in *Gallinago*, and both larger and longer. In *Gallinago* and in the Woodcock, too, the interorbital septum is quite complete, though in the former species many small deficiencies may occur in the bone on the anterior wall of the brain-case in some individuals. The *pterygoids* are exceedingly short and thick, the facet for the basisphenoid process occupying nearly the entire length of the shaft. This is especially the case in *Philohela*.

In the *mandible* of Snipes and Woodcocks the hinder end is bent down almost at a right angle, and the ramal vacuity is unusually large in *Gallinago*.

The Skull in the Long-billed Dowitcher.—In a skull of this species, *Macrorhamphus scolapaceus*, which I collected in New Mexico, I see a number of characters to remind me of the skull in *Gallinago*, but notwithstanding this, the conformation of the skull, especially its cranial portion, partakes more of the character of the larger Sandpipers.

The morphology of the superior osseous mandible is as in *Gallinago*. Superiorly, the *lacrymals*, however, jut out more distinctly and prominently, and their descending portions, *not at all produced backwards*, fuse with the large square *pars plana*. The post-frontal process is very long and extremely slender, while the interorbital septum is not so thoroughly completed in bone. *Maxillo-palatines* are practically absorted, as indeed they are completely so in Woodcocks and *Gallinago*. An osseous septum narium is also to be found in *Macrorhamphus*, which, as in Wilson's Snipe, is an extension forwards of the mesethmoid, and probably the nasals grasp it in the middle line beneath the premaxillary, but I would have to have the skeleton of a young snipe to prove that point. In all these true scolopacine types the zygoma is very short, straight, and slender, and inclined to be transversely compressed (especially in Wilson's Snipe).

The *mandible* of *Macrorhamphus* agrees with that bone in *Gallinago*, and the hyoidean apparatus in the two species is practically alike. Its osseous parts are extremely delicate in point of structure.

The skull of *Micropalama himantopus* offers us a most perfect go-between, standing as it does exactly between the Dowitchers (*Macrorhamphus*) and the *Tringas*. It is undoubtedly a Snipe-sandpiper in every sense of the word. The structure of the upper bony bill, as described above for *Gallinago*, has, in it, *almost* mellowed down to what we find in the typical Sandpipers, while the mandible shows the posterior flexure to some degree, and its cranium is truly scolopatricine.

Notes upon the Morphology of the Skull in the Sandpipers. — There is at my hand a complete skeleton of *Tringa maritima*, and its skull, except in point of size, appears to be almost exactly like the skull as we find it in *Phalaropus lobatus*. So far as the essential characters are concerned they are absolutely identical in the skulls of these two birds, and it is only slight variation in *pattern* that causes any differences to exist at all. The bill of the Phalarope is *straight*; the bill of the Sandpiper is somewhat *decurved*, but withal, the characters of this part of the skull are the same. *T. maritima* has the supra-occipital foramina present, but they are likewise so in *Crymophilus*, and I count very little on that fact.

Tringa ptilocnemis has a skull that very closely resembles the skull as found in *Aphriza virgata*. The differences between the two are hardly worthy of notice.

Tringa minutilla has a skull of the most delicate construction, but it is typically limicoline and scolopacine as well.

Most noticeable in *Tringa* is the absence of the supra-orbital glandular depressions and the extreme narrowness of the region of skull where they occur in the other forms. *Tringa fuscicollis* has the supra-occipital foramen and the fenestra in the interorbital septum, as in the curlews. There seems to be in the mandible an inclination for the hinder ends to bend downwards.

This character is also observable in *Tringa minutilla*, and in this sandpiper the space between the orbital margins, on the superior aspect of the skull, is reduced to a very narrow isthmus. It is much wider, comparatively, in *Tringa bairdi*; and this form also faintly shows the glandular depressions. They are quite well marked behind. The mandible shows the posterior bend, and the articular extremities throw

off behind lamelliform, upturned processes that are a prominent feature in this bone. The vomer is pointed in front, and the supraoccipital foramina are present.

Tringa maculata and *Tringa alpina* possess skulls very much alike in many of their characters—in the arrangement of the maxillo-palatines, the presence in each of the glandular depressions with a similar form. Both have the supraoccipital foramina and great deficiency of bone in the anterior wall of the brain-case and interorbital septum. They differ in the form of the ethmoidal wings. *T. maculata* shows a little bony loop, projecting forwards from the outer borders of this plate, which is absent in the Dunlin. In the Pectoral Sandpiper this ethmoidal plate is not carried up so far as it is in *T. alpina*, in which bird it absorbs the lacrymal on either side.

The little osseous loop on the ala-ethmoid, referred to as a character in *T. maculata*, is seen also in *Rhyacophilus solitarius*. Here, however, its upper limb comes down from the lacrymal to throw in its lower limb at a right angle to the ethmoid. This explains the manner in which it is developed and accounts for its presence. The vomer is pointed anteriorly in the Solitary Tattler. A deep median pit characterizes the cranio-frontal region in *T. pusillus*.

In *Actitis macularia* the glandular depressions on the roofs of the orbits are long and narrow and bound the entire supra-orbital periphery. This constitutes a real difference as compared with all true sandpipers, and also denotes in some degree a relationship to the curlews.

A. macularia has also the supraoccipital foramina present, and of some considerable size. Very large vacuities occur in the interorbital septum, and the foramina for the optic, olfactory, and other nerves have all run together to form one large irregular foramen.

Bartramia longicauda does not possess the supraoccipital foramina, and the glandular depressions above the orbits are still narrower than they are in *Actitis*. In this latter Sandpiper we find a minute spur on the anterior margin of the *pars plana*, directed forwards; and its maxillo-palatines have each such a large vacuity in their bodies that either one is reduced to a mere hair-like rim of bone. Its vomer is long and pointed.

The skeleton of the remarkable Spoon-bill Sandpiper (*Eurynorhynchus pygmaeus*) has been examined by Mr. J. Anderson, and he completes his paper on the subject by saying that "The foregoing exami-

nation of the osteology and other characters of *Eurynorhynchus* reveals only one important feature wherein this bird structurally differs from the genus *Tringa*, namely, the singular expansion of the bill, the structural equivalent of a similar modification in *Platalea leucorodia*. Indeed, this species, as pointed out by Mr. Harting, was originally placed in the genus *Platalea* by Linnæus."¹

A careful study of the skull of *Heteractitis incanus* convinces me that in that part of its anatomy it indicates rather close affinity with such forms as *Totanus flavipes* and *T. melanoleucus*.

We will now pass to the consideration of the skull in some of these birds, as well as of the Godwits and others.

Skull of the Godwits, Willets, Tattlers, and Others.—In *Totanus melanoleucus* the glandular depressions above the orbits are wider again, and the supraoccipital foramina are present. A median notch is found in the upper border of the foramen magnum. In *Totanus flavipes* nearly half the anterior wall of the brain-case is deficient, and the interorbital septum is not formed in bone at all. This latter character does not occur in the Willet (*Symphemia semipalmata*). In this interesting bird we find the supraoccipital foramina to be of some size, and of an elliptical outline. The glandular depressions are barely perceptible. Just beyond the cranio-facial region, on the culmen, we note the persistence of the premaxillary sutures. This shows to some extent how far the nasals must extend forwards. The vomer is pointed anteriorly, and the interorbital vacuity is divided by an osseous bar. Upon a basal view we find that the lower borders of the maxillo-palatine plates appear. They are attached to the palatines anteriorly, being directed backwards as free lamina. Their connection anteriorly with the maxillaries is by their outer angles. In the mandible of *Symphemia* the true ramal vacuity has become a mere slit, filled in with a plate of bone; while the small foramen I described in the Curlews is here very large, and has more the appearance of the true ramal vacuity as seen in other birds.

This condition likewise exists in *Limosa fedoa* and *L. hamastica*. The rims of the orbits in the former bird are rounded, differing in this respect from the Curlews. In this Godwit, too, we note a pointed

¹ Anderson, J. "On the Osteology and Pterylosis of the Spoon-billed Sandpiper (*E. pygmeus*).” Trans. Linn. Soc. (2 ser.). 1. Zoölogy. London, 1879, pp. 213–217. The quotation is from p. 217. A handsome plate (osteology) illustrates this memoir.

vomer in front, and the presence of the supraoccipital foramina in the occiput. The glandular depressions above the orbits have disappeared, and the openings in the interorbital septum are three in number, and smaller. A deep, circumscribed, and obliquely inclined groove is found on the lateral aspect of the skull, back of the entrance of the ear. In *Limosa rufa* a deep gutter is seen between the orbits on viewing the skull from above. Anteriorly it is bounded by an eminence on the premaxillary. The lacrymal is small in all the Godwits, and connects with the ethmoidal wing, as in the Curlews. In this genus *Limosa* the structure of the superior osseous mandible is much as we find it in *Gallinago*, as given above.

I have not examined the skull of the Ruff (*P. pugnax*); it, however, probably only exhibits the usual limicoline characters, with some slight modifications for that particular species. In writing to Professor A. Newton for a skeleton he replied to me in a letter of the 27th of November, 1889, and said: "Herewith I send you a sternum of *Machetes*; I regret to say that we have no skull. It is a most useful thing to have correspondents who make demands like yours upon us, as thereby we learn our deficiencies. Of course we ought to have at least one skeleton of this form, and I shall make it my business to try to get one next year — but it will not be a very easy matter; the bird is practically extinct in England (*i. e.*, there is only one place known where it still exists, and nothing would tempt me to procure one thence) and is become so rare in Holland that I doubt whether any are now sent to our markets, and I think it must be ten or a dozen years since I have seen one in a poulterer's shop."

Comparative Notes upon the Remainder of the Skeleton in the Curlews and other Forms.

There are fifteen vertebræ in the cervical portion of the spinal column of *N. longirostris*. The only other complete skeleton I have of a Curlew (*N. borealis*) shows the same number, so probably this holds for the genus. Free ribs occur on the fourteenth and fifteenth, and in my specimen of the Long-billed Curlew, the thirteenth vertebra of this chain shows persistent sutures upon the lines of ankylosis of the pleurapophyses on either side. So individuals of this species may be found wherein three pairs of cervical ribs exist, they being free upon the last-named vertebra. In the *atlas*, the neural arch is very broad from before backwards, with its posterior angles tipped with

small nodules of bone. The cup for the occipital condyle is perforated by a minute foramen at its base. We find the neural spine of the axis to be represented by a large and tuberos knot of bone, and the transverse processes in this vertebra, directed upwards, backwards, and outwards, are unusually stout and heavy. The "odontoid process" is small, and shows an articular facet on its inferior aspect. Beneath, the hypapophysis is a strong plate of bone, pointing backwards, with thickened border below.

The third vertebra has well-developed parapophysial spines; a closed vertebral canal; elliptical foramina, one on each side, in the

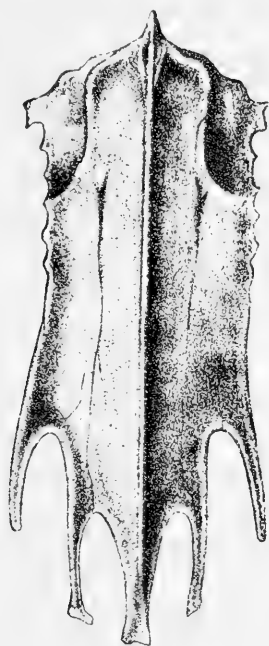


FIG. 14. The sternum of *Numenius longirostris*; pectoral aspect, natural size.

lamina of bone extending between the zygapophysial processes; a neural and hypapophysial spine, the former being a small plate situated posteriorly. In the fourth vertebra these characters are all still to be found, though the foramina above are closed in only by an extremely slender interzygapophysial bar. The fifth vertebra is very much elongated; the mid-portion of the centrum is represented by a median longitudinal lamina of bone, extending between the more

solid and terminal pieces that support on their outer aspects the articular facets for the vertebræ before and behind it. The neural spine is reduced to a sharp line; the posterior zygapophyses are outstanding processes. The sixth, seventh, eighth, and ninth vertebræ are substantially the same in character as the fifth, though they are growing shorter as we proceed backwards. They show also the open carotid canal. In the tenth vertebra this is replaced again by a hypapophysis, a single plate placed anteriorly on the centrum beneath. The vertebral canal is still a closed passage, and the neural spine is absent. Extensive pneumatic foramina exist in all the ultimate segments of the cervical division of the spinal column. The eleventh and

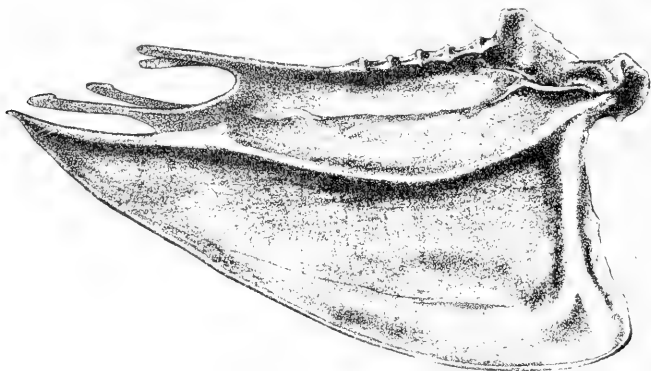


FIG. 15. The sternum of *Numenius longirostris*; right lateral view, natural size.

twelfth vertebræ are slowly changing, to bring about what we find strongly developed in the thirteenth. In this latter we observe a well-pronounced *double* neural spine, occupying a mid-position on the neural arch. The postzygapophyses are elevated, but still project outwards. Anteriorly, the vertebra is very broad from side to side, owing to the far-spreading transverse processes that here overarch the vertebral canal, it being closed in beneath by the anchylosed ribs, already alluded to above as being a character of this vertebra. The lateral aspects of the centrum show a deep elliptical pit on each side, with numerous circular pneumatic perforations at their bases. The hypapophysis is a single plate, occupying the mid-portion of the centrum. In the fourteenth vertebra the ribs, or rather the delicate pleurapophyses, have been liberated; the hæmal spine exhibits evidences of becoming tricornute; the neural spine stands well above the vertebra

as a tuberos and solid mass, bearing sharp spines directed backwards upon its outer and posterior angles. These are the continuations of the lateral raised rims of the neural spine proper, and they project also somewhat anteriorly. This is one of the most prominent features of the fifteenth or last cervical vertebra; it is explained, however, in the dorsal series by its evolution into the ordinary quadrate dorsal neural spine, with the forked extremities of the limiting rim at their crests. The hæmal spine of the fifteenth vertebra is triplicated, having three plates, though they are not particularly prominent. In it, too, the free ribs are quite long, and are without uncinæ processes.

Numenius borealis shows but few structural departures in its cervical vertebrae from those I have just described for *N. longirostris*.

The cup of the atlas does not seem to be perforated at its base; the pleurapophyses of the thirteenth vertebra bear no striking resemblance as yet to free ribs, as they do in the Long-billed Curlew. The carotid canal is found traversing identically the same vertebræ in mid-neck. In both these Curlews there are five vertebræ in the dorsal series, all articulating freely with each other. Above, they have long osseous metapophysial filaments that stretch for the length of one or nearly two vertebræ before and behind, in the middle of this region. The tendons have also become ossified and attached, and reach far backwards from each segment, those of the last running into the ilio-neural canals of the pelvis. The first dorsal vertebra shows two little lateral processes at the lower extremity of its hæmal spine; this plate is single and prominent in the next vertebra, but does not appear in any of the others. Each dorsal vertebra has a pair of ribs, of the most common pattern, as seen among birds. They connect with the sternum by costal ribs, and have freely articulated uncinæ processes. These latter are very long and narrow, reaching nearly in mid-series to the second rib to their rear.

In Curlews the pelvis also supports two pair of free ribs. The first pair has all the character of the dorsals, being simply slenderer and longer. The ultimate pair is devoid of uncinæ processes, and their hæmapophyses only articulate along the posterior borders of the pair in front of them, so do not reach the sternum. I find again in my specimen of *N. borealis* an additional piece, or free costal rib, attached to the posterior border of this last pair of costal ribs, on either side.

The number and arrangement of the vertebræ and ribs of the spinal column, as far as examined, agree very nearly with *Limosa fedoa* and *Recurvirostra*.

In *Himantopus* the number of cervicals and dorsals is the same as in *Numenius*, but there appear to be one pair less of sacral ribs.

The arrangement in the Phalaropes agrees with what we find in *Himantopus*.

In *Gallinago* and the Woodcocks the arrangement is different. In them there are twenty-one free vertebræ between the skull and pelvis; but two pairs of cervical ribs (the first very minute); six pairs of dorsal ribs that meet the sternum through costal ones below; two pairs of pelvic ribs, the hæmapophyses of the first not reaching the sternum, and the last pair fused with the ilia and almost aborted.

In *Tringa maritima* these latter are not present, otherwise the arrangement and number of the ribs and vertebræ in the cervico-dorsal part of the trunk skeleton is the same as in *Gallinago*. On the other hand *Bartramia longicauda* agrees with the Curlews in this matter, while all the Sandpipers that I have examined have these parts as they occur in *T. maritima*. The arrangement for other important forms will be fully presented when we come to examine the osteology of *Aphriza virgata* beyond.

Of the Pelvis and Coccygeal Vertebræ.—Viewing the pelvis of *Numenius longirostris* from above, we observe that the total pre-acetabular area is about equal in extent to the post-acetabular area. The ilia are long and narrow, with serrations in their anterior borders. These bones are concaved in front, and present a dimple immediately in advance of either acetabulum on this aspect. About their anterior thirds they grasp the common neural spine of the sacrum between them, thus creating closed ilio-neural canals.

Posterior to the acetabulæ, these bones present convex surfaces, being drawn out behind into prominent processes that curve inwards towards each other and the median plane (see Figs. 16 and 17). They develop outstanding ledges that overhang, on either side, the anterior half of the ischiadic foramen. The sacrum does not unite with the post-acetabular part of the ilia, a very marked interspace existing between them. A double row of elliptical foramina standing among the fused lateral processes further characterize this compound bone.

Upon a lateral view, the long and pointed ischium is presented to us. Posteriorly it reaches nearly as far backwards as the post-pubic style (see Fig. 17), the latter being in contact with it near its termination. The pubic style does not quite close in the obturator foramen

in any of the Curlews. Above the latter we find the ischiadic foramen, which in *Numenius* is very large and elliptical in outline.

The lower part of the posterior border of this pelvis exhibits a triangular notch which marks the original division between the ilium and the ischium, and this latter bone from being so long and narrow, is deserving of especial notice.

There appear to be fourteen vertebrae fused together in the pelvic

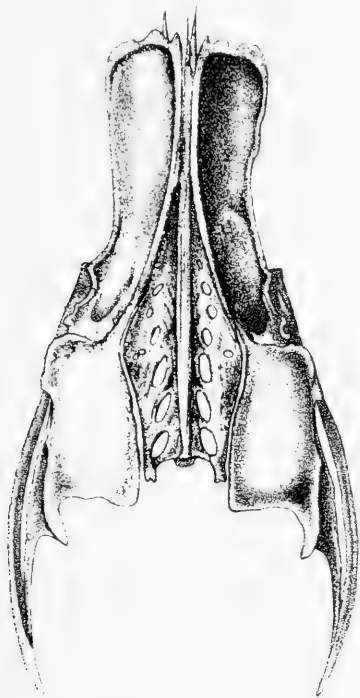


FIG. 16. The pelvis of *Numenius longirostris*, seen from above; natural size.

sacrum of a Curlew, and the two anterior ones throw out diapophyses to the ilia, and bear the facets for the pelvic ribs. In the third vertebra of this series, these processes are extended almost directly upwards, while in the fourth and fifth, again, they are horizontal, as in the first and second. From the points where the diapophyses of the fifth meet the ilia, these latter bones sweep outwards, and are fashioned to form the anterior part of the "basin of the pelvis." The tenth sacral vertebra throws out a strong pair of transverse processes that

have widely dilated extremities which articulate with facets especially designed for them on either ilium just posterior to the acetabulum, one on either side.

Foramina for the exit of the sacral nerves are double, one being placed above the other, the increase of caliber in the neural canal of the corresponding dilatation of the cord taking place in the sacral vertebrae from the fourth to the ninth inclusive.

Although more delicately constructed, the pelvis in *N. borealis* agrees substantially in all particulars with the bone I have just been describing for its more powerful congener, the Sickle-bill.

There are ten coccygeal vertebrae in *N. longirostris*, which count includes the triangular and rather large pygostyle.

In *Gallinago delicata* the pelvis is inclined to be long and narrow, and its ischia behind deep and drooping. In front, the ilia meet the sacral crista for a limited distance, on the ridge anteriorly. At the



FIG. 17. The pelvis of *Numenius longirostris*, left lateral view ; natural size.

side, the obturator space is quite obliterated, and the obturator foramen of very small size, indeed. Broad and triangular processes, one on either hand, project backwards over the ilio-ischiac notches posteriorly. There are two vertebrae that throw out apophysial braces opposite the acetabulae within the pelvic basin.

Including the rather small pygostyle there are *eleven* vertebrae in the skeleton of the tail in this Snipe. There appear to be but ten in a specimen of the American Woodcock (*P. minor*), and the pelvis of this bird much resembles that bone in *Gallinago*, though we note that the ilia by no means meet the sacral crista anteriorly on the dorsal aspect, and the posterior ends of the ischia are not so long or pointed.

Sandpipers (*Tringa*) and the Phalaropes have their pelves and coccygeal vertebrae much alike. The pelvic bones in *Tringa maritima* are somewhat thin, and the interapophysial foramina of the sacrum numerous, and very open or rather large. On the whole the bone is

broadish and compressed from above downwards; the ilio-ischiac notch distinct; and the ischia very much produced behind, being carried along on top of the post-pubis, on either side, as a delicate pointed spine, reaching almost to its end behind. This species has, including the pygostyle, *ten* coccygeal vertebræ. Other Sandpipers possess pelves much upon the same plan.

In *Limosa*, *Totanus*, *Heteractitis* and in the Willets (*Symphemia*) the pelvis comes considerably nearer the pattern as we found it above among the Curlews. I am confident that in the *Limicolæ* the number of coccygeal vertebræ is liable to vary even within the genus. They range from seven to eleven, and may or may not be constant, although I think that the number which may fuse with the pelvic sacrum, in any



FIG. 18. The *os furcula* of *Numenius longirostris*; a three-quarter oblique view from the right side; natural size.

species, has not a little to do with it. The count in immature birds would be the most accurate.

Of the Shoulder-Girdle (Fig. 18). — We find in *Numenius longirostris* the usual bones allotted to this arch free and articulated in the manner as commonly seen in many of the class. The shape of the *os furcula* is upon the broad U-variety, and is broader in this Curlew than it is in others of the same genus, and still more so than in the Plovers. Viewing it laterally, we observe also that it is very decidedly curved upon itself, with the convexity directed forwards when *in situ*. When articulated, the long and pointed clavicular heads rest on either side against the inner aspects of the summits of the coracoids, while the tips extend backwards to meet the usual process furnished by each scapula. This brings the hypocleidium opposite the middle of the anterior border of the sternum, from which it is separated by quite an interspace.

The clavicles are broader and larger at their superior or coracoidal extremities, being compressed from side to side. Above, the broad surface looks outwards; but it is gradually changed in direction as we descend to the hypocleidium, so that below it looks forwards (Fig. 18). The hypocleidium is of a quadrate form, rather small, and has an extension of its posterior border carried up behind on the line of the median clavicular union.

In *N. borealis* (No. 12,595, Smithsonian Collection) the *os furcula* possesses all the characters I have described for the Long-billed Curlew. As already intimated, however, the arch of the U is not as open, the clavicular heads are not so pointed, and the hypocleidium is nearly round in form, not being so perceptibly carried up on the clavicles at their point of meeting below. Among the Plovers we found that it had the same general characteristics, and it holds the same relative position when articulated to the other bones of the shoulder-girdle.

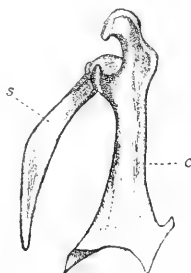


FIG. 19. Direct anterior aspect of the left coracoid and scapula of *Numenius longirostris*; natural size. *s*, scapula; *c*, coracoid.

For the size of the bird, the furcula is large in *Gallinago*, as it is in the Woodcock, but the general pattern remains the same as for the Curlews. Indeed it varies but little in form for the *Limicolæ* generally. In the Sandpipers, as a rule, the hypocleidium is more posteriorly situated, and in *Actitis* this process almost comes in contact with the anterior edge of the keel of the sternum, when the bones are *in situ*.

In some genera the hypocleidium is very small, as in *Limosa*; in others, as in the European Woodcock (*S. rusticola*), the bone is large but its limbs are slender. The hypocleidium is also small and a distinct jutting facet is thrown out on the external aspects of the free clavicular ends above, for articulation with the fore part of the head of either coracoid. This is a Plover-character, and more remotely indi-

cates larine affinities, and relationships with birds belonging to more lowly groups, wherein this character is far more pronounced and at the same time a very common one. In the Ruff, and some other forms, the U is not so spreading, and the clavicular limbs in front of the coracoidal articulations are considerably compressed in the transverse direction. And these latter, in this situation, are upon their outer aspects longitudinally concaved in *Gallinago delicata* and in *Totanus flavipes*. Some Sandpipers also exhibit this latter character. Taken as a whole, however, the *os furcula* varies but very little in its general form among the typical limicoline birds.

The *coracoid* of *Numenius longirostris* is comparatively a short, thick-set bone, as scarcely any true shaft exists between its humeral

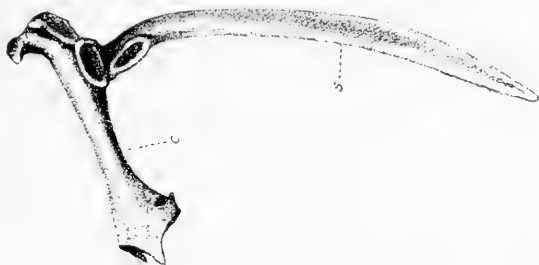


FIG. 20. Left scapula and coracoid of *Numenius longirostris*; natural size.

and sternal extremities. Such as it is, however, is transversely elliptical on section, the section being made just below the inner process at the head of the bone. The sternal extremity is broad from side to side, in which direction it is also convex anteriorly and concave behind. Below, the sternal margin is divided into two deep concavities; the inner and broader one is completely occupied by the articular facet for the sternum. The outer is sharp and free, having attached to its upper horn a pointed and up-tilted little spine, that I will call the *costal spine* of the coracoid, it being opposite the costal border of the sternum. On the outer aspect of the bone we find the usual elliptical facet that here forms about the two thirds of the glenoid cavity (Figs. 19 and 20). The summit of the bone consists of a massive hooked process, directed forwards and inwards. Above and behind, it is impressed by a shallow concavity, while its inner surface is devoted to an elongated facet for head of clavicle. Below this on the inner side, we find another lamelli-form process, curving inwards, upwards, and forwards, that at its tip also

comes in contact with the clavicle when the bones are *in situ*. The posterior margin of this latter process is given up wholly to the scapula, which in life abuts against its entire length, as well as the shaft behind as far as the glenoid cavity.

In *Numenius borealis* the coracoid is a mere miniature of the bone I have just described for the Sickle-bill. Its costal process is, however, much less strongly marked, and would hardly attract special notice. The coracoids, as well as the other bones of the shoulder-girdle, are non-pneumatic in the genus *Numenius*, and I believe generally so among the *Limicolæ*.

When articulated, the coracoids lean well forward as they spring from their sternal beds in the Curlews, while the scapulæ make angles with them of about 90° . They do not quite meet in the median line in any of the species, but are separated at this point by a thin compressed surface on top of the manubrium.

The anterior extremity of the *scapula* in *N. longirostris* is decurved, broad, and compressed from above downwards. The blade of the bone, which is comparatively long, becomes thinner and slightly wider posteriorly, to be very obliquely truncate at the inner side of its posterior third. The angles thus formed are well rounded off, resulting in the production of a very ordinary form of this bone (Fig. 20). *N. borealis* has the hinder moiety of the scapula broader, more blade-like, the truncation more decided, and its posterior apex in the articulated skeleton overhanging the anterior margin of the ilium.

In other limicoline birds the coracoids and scapulæ have always much the same general appearance that those bones have in the Curlews.

In the European Woodcock the coracoids are relatively longer than in *Numenius*, and they are inclined to be compressed in the antero-posterior direction. The costal process of one of them is conspicuous, and the summit of the head of the bone is marked by an oval pit. This last character is also seen in *Aphriza*, *Tringa*, and in the coracoids of many other shore birds. Everything else being equal, the coracoids in *Gallinago* are shorter and more slender than they are in the Woodcocks. Comparatively speaking they become still shorter among the Sandpipers. The scapulæ agree pretty well all round, varying only with the size of the species, and occasionally in the pattern of its posterior third, where the style of acumination is apt to vary.

In the Avocet and in the Oyster-catchers when the shoulder-girdle is *in situ*, the coracoids touch each other in the median plane over the manubrial process of the sternum.

The Willets (*Symphemia*), *Totanus flavipes* and *Bartramia longicauda* all have the costal process of the coracoid quite prominently developed; in *Limosa uropygialis* (Smithsonian Collection, No. 12,590) it is broad and quadrilateral in outline and but slightly curved upwards.

Of the Sternum (see various figures).—This bone is greatly developed in all the limicoline birds, and in *L. longirostris* it is unusually so, when we come to take into consideration the size of the species to which it belongs. The manubrium is for the most part a thin compressed median plate, with sharp edge below and thickened border above. At its base superiorly, it is contracted again to an edge, that just keeps the coracoids apart in the articulated skeleton. The coracoidal grooves lie in the horizontal plane; they are broad from above downwards, convex at their middles, and concave at their inner and outer limits. Anteriorly, the margin of the keel is very sharp, being carried clear up to the base of the manubrial process. It appears above, however, merely as a line on the front of that column of bone that descends in this situation, to be gradually lost as it expands on either side of the keel below within this anterior margin. The carinal angle in *N. longirostris* is rounded in front, being partly covered by the raised rim that bounds the entire length of the keel below. This latter part of the sternum is exceedingly deep, being carried backwards to the very end of the sternal body by a graceful curve (Fig. 15).

Upon the costal border we observe six transverse facets for articulation with the hæmapophyses. They are limited beyond by a low quadrate costal process—a feebly-pronounced feature in the sternum of our Curlew. So high do the sides of the sternal body itself arise that it reminds one very much of a very deep spoon with slender processes projecting from its free border in front, corresponding to the hinder border of the sternum. These processes are four in number, two on either side, making this sternum a four-notched one. Their shape and arrangement can best be seen by referring to my drawing in Fig. 14. On the superior aspect of the sternum, in the median line, and just within the anterior boundary, we find a deep pit with rounded margins. At its base, there seems to be a few minute, pneumatic perforations. The usual muscular lines are found to be strongly

marked on the sternal body and keel in this Curlew, being carried back, in each case, nearly to its xiphoidal extremity.

The chief differences presented to us in the sternum of *N. borealis* are a greater width of the mid-process posteriorly, and a very decided protrusion forwards of the carinal angle anteriorly. In all other respects the sternum of the Eskimo Curlew seems to be the very miniature of the bone I have just described for the Sickie-bill Curlew.

Passing next to the sternum as we find it in *Scolopax*, *Philohela*, and *Gallinago*, it is to be observed that the bone has, in its general form, precisely the same pattern as it has in *Numenius*. The carinal angle, however, is more prominent and pointed, and the sterna of these birds lack the internal pair of xiphoidal notches. I have one sternum of a specimen of Wilson's Snipe (*Gallinago*) though, that on the right hand side has a foramen at the locality where the inner notch occurs in other *Limicolæ*. Most Sandpipers have a sternum like what we found in the Curlews, but the posterior xiphodal border, as indicated by the ends of the xiphoidal processes, lays more in a transverse line, not being nearly as much rounded as it is in *Numenius*. *Limosa* has the inner pair of notches very small, and they are absent again in such genera as *Pavoncella* and *Rhyacophilus*. Avocets have all four of the notches, and in them they are about of equal depth, while in *Totanus* they agree with *Limosa*. *Bartramia longicauda* shows a small pair of inner notches in its sternum, with very deep outer ones.

Gallinago has the manubrium very small, and in the sternum of that species the pectoral muscular lines on the sides of the carina are raised and rounded welts. This last character is wanting in Woodcocks, and in them the manubrium is larger. I believe in all the unmentioned species the sternum is four-notched, and in other respects substantially has the pattern of that bone as it is seen in *Numenius*.

Of the Appendicular Skeleton.—All the bones of both limbs in the *Limicolæ* are non-pneumatic in character. As a rule, the long bones are straight, and comparatively very long. They are also strong and otherwise perfectly developed—shore-birds being, as we know, good fliers.

The *os humero-scapulare* seems to be absent, its place being taken by ligaments, as in other birds where this ossicle does not appear.

The *humerus* (Fig. 21) of *Numenius longirostris* has a shaft that is much straighter than is commonly seen among birds, where it is usually formed like a long \int . Its proximal extremity is comparatively widely

expanded, which expansion includes the graceful canopy that arches over the unpierced pneumatic fossa. A deep notch divides this from the articular facet or head for the glenoid cavity.

The radial crest is well developed and bent outwards almost at a right angle with the vertical plane of the bone, when viewed in a position of rest. Should a section of mid-shaft be made, the figure would be very nearly circular; it becomes triedral proximally and roughly elliptical towards the distal end. In this latter region, above the external condyle, an "epicondylar" process is developed; and this process is developed in a greater or less degree in all shore-



FIG. 21. Right humerus of *Numenius longirostris*, anconal aspect; natural size.

birds. Its apex is intended for muscular attachment. There is a well-marked fossa just proximad to the distal articular tubercles of the humerus.

Viewed from above, the shaft of the *ulna* is seen to have a long, gentle curve, extending from one end of the bone to the other, being the greatest near its proximal extremity.

The papillæ for the quill-butts along the shaft are quite distinct in this bird, and still more so in the Oyster-catcher, where they present the unusual condition of being narrow and oblong in shape, and placed, as it were, obliquely on the shaft. To the inside of these a secondary row is seen, running down the shaft longitudinally. These little protuberances are scarcely perceptible in the Phalaropes or in *Tringa*.

The radius of *N. longirostris* does not exhibit so much of a curve in its shaft as its companion in the antibrachium, though it is gently bent throughout its length. A concavity is scooped out of its shaft near the head, over which tendons pass in life.

The *carpus* contains the two free bones ordinarily found there in adult birds, articulating after the usual manner.

All of the *Limicolæ*, so far as I have examined them, are endowed with a remarkably long hand. If we allow the bones of the carpus to be added to it, its length in the Sickie-bill is fully equal to that of the

ulna. Each bone lends its proportional share to produce this result. The shaft of the second metacarpal is, for the most part, cylindrical in form, while its anchylosed companion is of very slender proportions. I find^{ed} in *Numenius* and *Hematopus* a delicate, curved and free claw-joint, suspended from the distal end (Fig. 22, *x*).

There is an ample expanded portion springing from the posterior

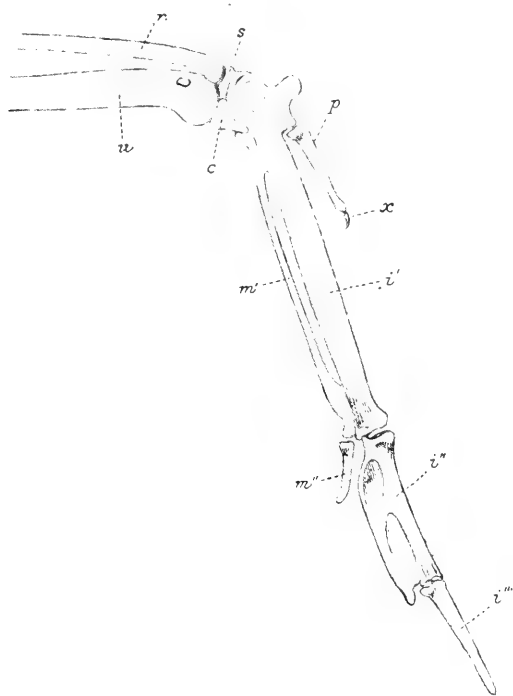


FIG. 22. Palmar aspect of right manus of *Numenius longirostris*, showing also distal extremities of radius and ulna, natural size. *r*, radius; *u*, ulna; *s*, radiale; *c*, ulnare; *p*, pollex; *x*, claw on pollex; *i'*, index metacarpal of carpo-metacarpus; *i''*, its first or proximal phalanx; *i'''*, its distal phalanx; *m'*, medius metacarpal of carpo-metacarpus; *m''*, its digit.

aspect of the first digit of second metacarpal. It is produced downwards as a flattened and peg-like process, not commonly seen. This phalanx supports below one more long and slender joint. The smaller digit of the third metacarpal has a shape not unlike a compressed claw, as it hooks over the expanded portion of the finger at its side.

The Pelvic Limb. — After the process of maceration and drying,

the femur of this Curlew has all the appearance of a pneumatic bone, but careful search fails to discover the orifices at their accustomed sites, though a few very minute openings are to be seen on the opposite side of the bone, below the facet. This, I must believe, would be an unusual locality for such foramina. The femoral shaft in *Numenius* is straight, smooth and cylindrical, with all muscular lines nearly obsolete. A rough surface is found on the back of the trochanterian prominence, and this portion rears well above the facet at the summit.

The pit for ligamentum teres is very shallow, and rather irregular in outline. Several of the characteristic features of the distal extremity of the bone are more keenly defined than those just described for the proximal end. The intercondyloid notch is deeply excavated; the anterior border of the external condyle is a sharp crest, while the corresponding surface on the internal one is evenly rounded. Upon the reverse aspect we find the popliteal depression well sunken, and the notch for the head of fibula cleanly cut out. A tubercle and pit exist on its outer and condyloid side for ligamentous attachment.

The length of the tibio-tarsus in this Curlew is double that of the femur, and the shaft of the bone has a general convexity inclined outwards. Sections taken through its middle third are subellipses, and the expanded extremities are rather abruptly attached, more particularly the proximal one. There the pro- and ectocnemial processes rise squarely from the shaft, showing but little of that tendency to merge gradually into it below. The ectocnemial process is shaped like a claw, with its joint inclined downwards. Its fellow is much larger, lamelliform, slightly turned outwards, quadrilateral in figure, with the angles rounded off. They are produced upwards as a rotular process to a very slight extent. The fibular ridge stands out from the shaft on its outer aspect as a prominent and rather extended crest of bone.

At the distal extremity we find the inner condyle to be smaller than the opposite or outer one, as well as proportionately narrower from above downwards. In the groove between them anteriorly, the tendinal ridge is ossified, the span being thrown directly across, and not obliquely, as it is in some birds. Prominent tubercles exist on either side, immediately above it, for ligamentous attachment, and an additional bridge is formed of this material above this point. The *fibula* is compressed from side to side above, and club-shaped. After articulating with the ridge designed for it on the tibio-tarsus, it merges into the shaft of that bone a little over half-way down, measuring from the proximal extremity.

Himantopus, with its pelvic limb of twenty-nine centimeters in length, has a fibula that descends but one fourth the distance down the tibial shaft.

The *patella* in *Numenius* is, comparatively, very small, and of an odd, irregular shape. Oyster-catchers have this sesamoid only repre-

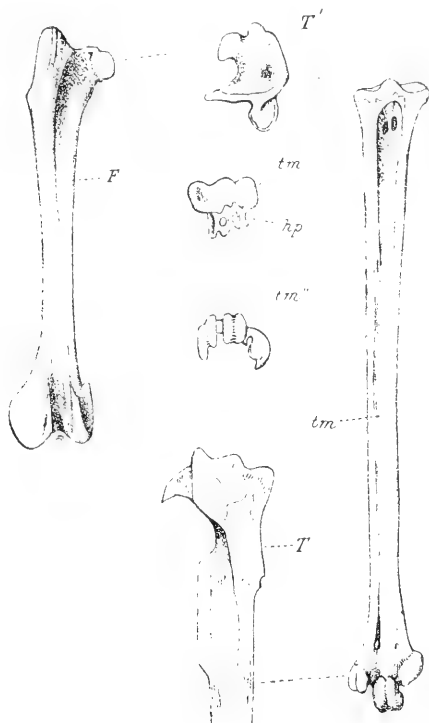


FIG. 23. PARTS OF RIGHT PELVIC LIMB OF *NUMENIUS LONGIROSTRIS*, Natural size. *tm*, anterior view of the tarso-metatarsus; *tm'*, a view of the surface of its proximal extremity at right angles to the shaft; *hp*, the hypotarsus; *tm''*, a view of the surfaces of the distal extremity of tarso-metatarsus at right angles to the shaft, showing the trochleae for the podal digits; *T*, upper extremity of the tibia; *T'*, view of its proximal surface at right angles to the shaft; *F*, anterior aspect of the femur.

sented in a diminutive cartilaginous nodule, and it is absent in other shore-birds. It is small in *Avocets* and *Willetts*.

The *tarso-metatarsus* of *Numenius* is but a little over a centimeter shorter than its tibio-tarsus. Upon the superior surface of its proximal extremity the articular facets for the tibial condyles are deeply

impressed, and a prominent tubercle arises between them on the anterior rim (Fig. 23, *tm*). Behind, the hypotarsus is bulky, being both grooved and pierced for the passage of the tendons. The shaft of this

Fig 24

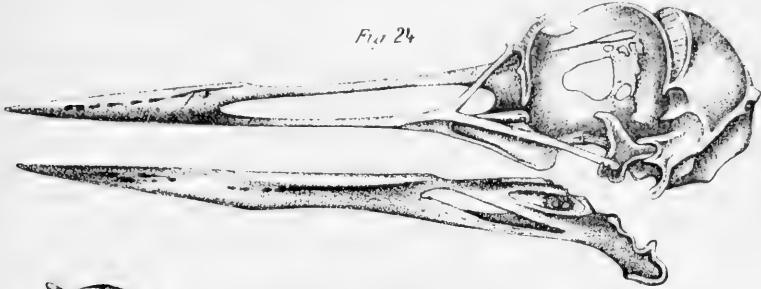


Fig 25.



Fig 26

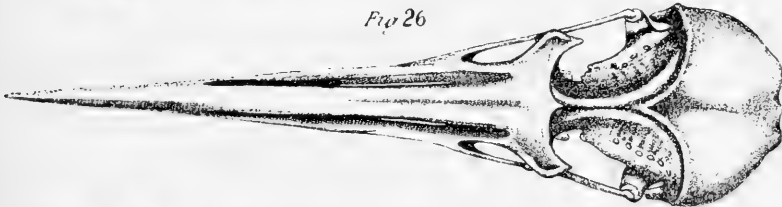


Fig 27

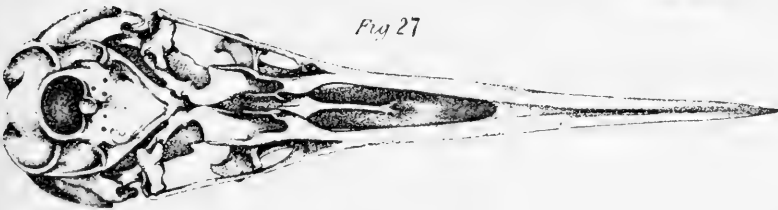


FIG. 24. Skull of *Hematopus backmani*, left lateral view; natural size.

FIG. 25. Mandible of *Hematopus backmani*, viewed from above; natural size.

FIG. 26. Skull of *Hematopus backmani*, superior aspect; natural size; mandible removed.

FIG. 27. Skull of *Hematopus backmani*, basal view; mandible removed; natural size.

FIGS. 24, 25, 26 and 27 are all drawn by the author from the skeleton of the same individual (No. 13,636 of the Smithsonian Collection).

bone is concave longitudinally for its entire length on the anterior aspect, and less so upon the posterior. The trochlear prolongations at the distal end are large, and the extremity much expanded, a feature still better marked in the swift-footed Oyster-catchers. When describing the skeleton in the Plovers I spoke of the fact of a number of the limicoline birds lacking the hind toes. This is the case with *Himantopus* and others. With respect to the Curlews, in number, the phalanges of the podal digits are arranged upon the common plan of the avian foot, and in no way offer us anything beyond the ornithic characteristics that pertain to the skeletal foot of a typical wader.

Now the writer has made many comparisons of the wing and leg bones of the *Limicolæ*, and has failed to find any very decided departures from what has been given above for the Curlews. Practically, the characters are the same throughout the suborder. Even those birds that show the more marked differences in other directions, as the Woodcocks and *Gallinago*, have the skeleton of the limbs typically limicoline. This does not apply to the comparative and relative lengths and calibers of bones, for such may differ, and probably do, among the various species and genera of shore-birds. Nor does the absence or presence of the claw on the pollex phalanx seem to go for much, for although entirely wanting in some forms, it is most rudimentary in others, while as we have seen, in *Numenius* it is a true claw, piercing the integuments and covered with a horny sheath. Such a claw never occurs, I believe, on the distal phalanx of index digit in any of the *Limicolæ*.

In so far as the osteology of the *Aphrizidæ* is concerned I have already given a full account of the skeleton of the Surf Bird in a paper entitled, "On the Affinities of *Aphriza virgata*," which appeared in *The Journal of Morphology* for November, 1888 (Vol. II., No. 2), and to it the reader is referred for such limicoline characters that are desirable to be taken into consideration with what is set forth in the present memoir. There are some few corrections the writer would like to make in the aforesaid paper, but they are not of sufficient importance to justify its republication as a whole. There is, however, one point I should like to invite attention to, and that is what I say in that paper in regard to the unreliability of the so-called notches in the sterna of some genera of birds. As a character it attracted the attention of Professor Alfred Newton, F.R.S., and he wrote me from Cambridge, England, under date of December 14, 1889, and said in connection with

two sterna of the European Woodcock he kindly submitted me for examination, "but I send two to show how variable is the form of the posterior notches in this species; I have always maintained that characters drawn from this part of the sternum are *comparatively* of little value, and especially in the *Limicolæ*."

I now pass to a brief consideration of the osteology of the Jacanas.

NOTES ON THE SKELETON IN THE JACANAS (*The Jacanidæ*).

Jacanas are birds which have been considered by some as belonging to the family *Rallidæ* and by others placed in the present group. Their position here however, I think has now been most definitely settled, chiefly through the anatomical investigations upon numerous species of them, undertaken by Garrod and by Forbes. The former writer in his celebrated paper, "On the Value in Classification of a Peculiarity in the Anterior Margin of the Nasal Bones in certain Birds" has said that "*Parra* should be removed to the Charadriomorphæ," and the last-named talented anatomist in his excellent paper on "Notes on the Anatomy and Systematic Position of the Jacanas (*Parridæ*)."¹ has very conclusively settled their taxonomic position for all time. I will use this paper of Forbes quite extensively here for what there is to be said about their osteology. He examined specimens of *Parra jacana* and *gymnostoma*, *Metopidius indicus*, *africanus* and *albinucha*, and *Hydrophasianus chirurgus*, and the present writer has closely studied a mounted skeleton of *P. gymnostoma*. Garrod figured the skull of *Hydroleator cristata* (P. Z. S., 1873, p. 34, Fig. 5), and Forbes the skull of *P. jacana* (Coll. Sci., Memoirs, p. 224, Fig. 1).

In speaking of them as a family Forbes said in his paper: "There are well-developed basipterygoid processes, which are always absent in the Rails, though of very frequent occurrence amongst the 'Pluviales,' occurring in all the Charadriinæ and Scolopacinae I have examined. In *Parra jacana* and *Metopidius albinucha*, the long, narrow, slightly decurved vomer is emarginate apically, as in certain Charadriidæ. In the *Rallidæ* it is, I believe, always sharp at the point."

"The maxillo-palatine processes are rather slender and directed backwards; they have the form of concavo-convex lamellæ, are not at all swollen, and do not unite by some way in the middle line, the vomer appearing between and (when the skull is viewed from the palatal aspect) below them."

¹ Garrod, A. H., P. Z. S., Lond., 1873, pp. 33-38. See page 37.

¹ Forbes, W. A., P. Z. S., Lond., 1881, pp. 639-647.

“There is no ossified internasal septum, nor any ossification of the narial cartilages. The lacrymal is small, anchylosed with the nasofrontal region of the skull above, and with the ‘pars plana’ below.”

“On the posterior aspect of the skull there are no traces of the occipital fontanelles, which are found in so many birds related to the Plovers.”

“The supraorbital impressions for the nasal glands, which are so conspicuous in most Plovers, the Gulls, Auks and many other birds, are absent in the Parridæ.”

Forbes showed by a drawing how unlike the sternum of *Metopidius albinucha* was the bone as it is found in the *Rallidæ*, and added: “In the latter group the sternum is always peculiar in that the xiphoid processes exceed in length the body of the sternum, which tapers to a point posteriorly, and from which they are separated by very long and well-marked triangular notches. The carina sterni also is less well developed, and the clavicles are weaker and straighter, being less convex forwards than in the Parridæ. The sternum and clavicles of *Parra* and *Metopidius* in general form, on the other hand, resemble closely the type found in some of the Pluvialine birds (*e. g.*, *Thino-corus*, *Attagis*).”

“The pelvis, again, of the Rails presents certain well-marked peculiarities. If that of *Rallus aquaticus* be taken as a typical form, it will be found that the ilia are long and narrow, and but little expanded in their preacetabular part. The postacetabular portion of the pelvis is but little bent down on the preacetabular part; and the ischia and pubes are but little everted. The ischia are united by broad bony plates to about the three most posterior “sacral” vertebrae; between these plates and the expanded part of the ilia above are well-developed and deep fossæ, occupied, in the fresh state, by the posterior portion of the kidneys. Viewed from above, the well-marked “postacetabular” ridge, which divides off the dorsal from the lateral aspect of the pelvis, running from just behind the antitrochanteric eminence to the posterior spine of the ilium, presents, a little behind those two points, a strongly projecting process. The greatest breadth of the postacetabular part of the pelvis is therefore here, and not at the more anteriorly situated prominence, close to the antitrochanter. Viewed from the side, this ridge forms a sort of overlapping roof to the slightly excavated external pelvic fossa. The genera *Ocydromus*, *Aramides*, *Fulica* and *Porphyrio* do not essentially depart from this type.” “In

Parra and *Metopidius* the ilia are wider and more expanded anteriorly. The postacetabular ridge has hardly any median projection; and the pelvis is widest, dorsally, just behind the antitrochanters. The plates of bone between the ischia and sacrum are narrower, and the posterior part of the renal fossæ less well developed, and more open in consequence. In all these points these forms thus approach the Limicoline birds."

After showing the peculiarly *expanded radius* present in some of the genera of the *Parridæ*, and illustrating it by a drawing of the wing-bones of *Metopidius albinucha* (Coll. Sci. Mem., pp. 227, 228, Fig. 3), he adds: "In *Parra jacana* and *P. gymnostoma* the radius presents the ordinary form; and the same is the case in *Hydrophasianus chirurgus*. . . . The 'claw' or 'spur' of the wing of the Jacanas has, it may be observed, no relation whatever to the 'claw' or nail of the pollex, which is also present, though small, in all the three genera I have examined. The 'spur,' in *Parra jacana* at least, consists of an external, translucent, yellow epidermic layer, which invests a central core of compact fibrous tissue, this in turn being supported by a bony projection developed at the radial side of the first metacarpal."

"As regards the position of the *Parridæ* in the group *Pluviales*, it appears to me that they form a well-marked family, with no very obvious relationships to any of the other families of that group, approaching, however, perhaps most nearly to the *Charadriidæ*, from which they are easily distinguishable by the absence of supraorbital glands and occipital foramina, by their enormously elongated toes, by the number of rectrices, and other points. A brief definition of the *Parridæ* may be given as follows: "

"Charadriiform birds, with ten rectrices, short cæca, and a tufted oil-gland; with the ambiens, accessory femoro-caudal, and accessory semitendinosus muscles developed, and with the obturator internus triangular; with a two-notched sternum, and with the digits, including the hallux, greatly developed; with the skull provided with basipterygoid processes, but lacking occipital foramina and supraorbital gland-depressions."

I am inclined to depart somewhat from this finding of Forbes, and although I believe that the Jacanas belong among the Limicolæ, as we have here placed them, I am inclined to think that their relationship to certain of the Sandpipers is closer than it is with any of the Plovers.

In the first place they are more strictly aquatic than are most of the Plovers, and many of the latter have but three toes (the anterior ones). The Jacanas have a two-notched sternum, so has *Rhyacophilus solitarius* and *Actitis macularia* and probably other *Tringæ*. In all the typical Plovers, I believe, the sternum is four-notched. Jacanas have a habit occasionally, when standing, of stretching the wings upwards to their full extent above the back, so that they nearly or quite touch each other. *Rhyacophilus* and other Sandpipers have the same peculiar habit, and it is not practiced by the Plovers. The skull of a Jacana is quite as much tringine as it is pluvialine, as is also its pectoral arch, and some other bones of its skeleton.

In the specimen I examined (*Jacana gymnostoma*) I found the postero-external angles of the palatines rounded; and the vomer anchylosed with those bones. The basipterygoid processes were present. The vomer long, slender and rounded anteriorly. Two vacuities occupied the interorbital septum. Maxillo-palatines were small, elongated, not swollen, and nearly hidden by the præpalatines. Descending process of lacrymal fused with pars plana, and the bone anchylosed with the frontal and nasal above. Schizorhinal in type, it likewise possessed twenty-one vertebræ between the skull and pelvis (Rails, as a rule, have twenty-two). Morphologically, both sternum and pelvis are tringo-ralline, with the *os furcula* tringine in type. As to the ribs, I found five hæmapophyses that reached the sternum, and one pair that did not do so. There are two pairs of cervical ribs which articulated with their vertebræ. A *patella* is present which sesamoid is absent in true *Rallidæ*.

SYNOPSIS OF THE PRINCIPAL OSTEOLOGICAL CHARACTERS OF THE LIMICOLÆ.

1. Excepting certain parts of the skull, the entire skeleton is non-pneumatic.
2. Bones of the facial region (premaxilla) may be shortened (pluvialine types) or lengthened (scolopacine types); and in certain of the latter it may be either recurved or deflected to one side.
3. The sphenoidal rostrum is elongated and slender, and the mesethmoid projects forward beneath the premaxilla.
4. All the forms are of the schizognathous type, as well as schizorhinal.
5. The vomer may be small and spiculiform (*Philohela*), or long

and lamelliform. It may be pointed anteriorly, or bifurcated (*Avocets* and *Hæmatopus*) or rounded, as in some of the *Jacanidæ*.

6. The maxillo-palatines are usually plate-like, concavo-convex scrolls, often nearly absorbed by perforating foramina. In *Hæmatopus* they are flat and thicker, and fuse with the palatines.

7. Basi-ptyergoid processes are always present and functional.

8. The interorbital septum always shows a central perforation of greater or less size. This is least noticeable in *Macrorhamphus*.

9. The angle of the mandible may be either a sharp, recurved process or it may be lamelliform as in *Hæmatopus*. It may have its articular ends bent downwards as in the Woodcocks and *Gallinago*.

10. The sternum may have two pairs of xiphoidal notches (Plovers and others); or a single pair (*Actitis*, *Rhyacophilus*, *Jacanas*, Woodcocks and *Gallinago*). Its manubrium is never large, and the keel is deep. *Os furcula* is of the U-shaped pattern, and its hypocleidium small or nearly aborted.

11. Hallux usually much reduced in size, except in *Jacanidæ*, or may be entirely absent.

12. The phalanges of the anterior toes diminish in length from the basal to the penultimate.

ON THE AFFINITIES OF THE LIMICOLÆ.

Regarding this suborder as a whole, and selecting any genus of Plovers to represent its center, then by the aid of osteological characters alone, it is not a difficult matter to trace from them, through certain forms, to the *Laridæ* and their kin. On another line, and passing the Sandpipers, Willets, Godwits and Curlews in review, we find them also related to the Ibises and their relatives. Or from the Willets, through the Avocets and Stilts, they seem to lead to *Eurypyga*, and through such tringine forms as *Rhyacophilus* and *Actitis*, related as they are to the *Jacanidæ*, they lead to the *Rallidæ* of the suborder FULICARIE. Finally, W. Kitchen Parker has shown that through *Hæmatopus* and *Chionis*, their affinity with the *Tubinares* can be demonstrated.

In some respects the *Limicolæ* rank lower than the herodine and ralline types, while in other particulars they are undoubtedly higher.

Regarding the forms we have dealt with in the present chapter, and again selecting the Plovers as the center of the group, we find that through *Aphriza virgata* of the family *Aphrizidæ* they are linked

most perfectly with the *Tringæ*, as through the Turnstones of the Family *Arenariidæ* their kinship with the Oyster-catchers of the Family *Hæmatopodidæ* may easily be traced. Phalaropes are most nearly related to the Sandpipers; and the Woodcocks and *Gallinago* in their shoulder-girdles, pelves, and less so in their sterna, show strong ties with larine stock, as in its skull does also *Hæmatopus*. The line from the Plovers through the Sandpipers — and *Micropalama* — *Macrorhamphus* — to the true Snipes and *Scolapax rusticola* is clearly indicated, and most distinct. And starting from the pluvialine center again, we once more pass through the *Tringæ*, *Actitis*, *Rhyacophilus*, the Tatlers of the genus *Totanus*, through *Limosa* to the Curlews.

Some of these relationships cannot be definitely made out until we are in possession of a fuller knowledge of the anatomy in its entirety of many of the types which have been named in this memoir. At the present writing I am engaged upon preparing a provisional scheme of classification of AVES as a Class. In it I place the CHARADRIIFORMES (IX.) between the Lariformes and the group containing all the ralline types. They are then arranged in the following manner.

SUPERSUBORDER.	SUBORDER.	SUPERFAMILY.	FAMILY.
X. CHARADRIIFORMES.	Limicolæ.	{	Charadriidæ.
			Arenariidæ.
			Hæmatopodidæ.
			Aphrizidæ.
		{	Scolopacidæ.
			Phalaropodidæ.
			Recurvirostridæ.
			Jacaniidæ.
	Cursoræ.	{	Thinocoridæ.
			Dromadidæ.
			Glareolidæ.
			Cursoriidæ.
		{	Œdicnemidæ.
			Otididæ.

EXPLANATION OF PLATE.

Right lateral view of the skeleton of *Jacana gymnostoma*. Collection of the United States National Museum, No. 17,317. Nearly natural size.



Right Lateral View of the Skeleton of *Jacana gymnostoma*

IV. MINUTE BOOK OF THE VIRGINIA COURT HELD
FOR YOHOGANIA COUNTY, FIRST AT AUGUSTA
TOWN (NOW WASHINGTON, PA.), AND AFTER-
WARDS ON THE ANDREW HEATH FARM
NEAR WEST ELIZABETH ; 1776-1780.

EDITED BY BOYD CRUMRINE, OF WASHINGTON, PA.

INTRODUCTORY.

The minutes of this court, as well as those of the old Fort Dunmore court printed with an introductory sketch in Vol. I., pp. 505-568 of these *Annals*, are preserved in several old manuscript volumes of unruled paper, legal-cap size. The entries in these order books were evidently written hastily by the official clerks during the sessions of the court, accounting for the misspelling of many proper names and other words, and for frequent illegibility. They may have been intended to be copied out at length in the more formal records of the court proceedings ; but it is possible that, as the courts themselves as well as the Virginia territorial jurisdictions ceased to exist after the final running of the southern and western boundary lines, no other and more regular transcript of the orders was ever made, and that the records now published are the only ones in existence containing the judicial business of these ancient courts.

These records are accurately copied, when at all legible, as spelled and capitalized in the original ; even the punctuation is unchanged except now and then when thought to be absolutely necessary for intelligibility. For it is believed that when the details of local history are given, for the subsequent use of the general historian, this literalness of transcription gives color and strength to local incidents. So when one meets in old records with the name James Swolevan, he is interested in determining that the name must have been that of plain James Sullivan. And shall we say that the name " Worshington " was not " Washington " ?

Attention is called to the efforts made, as disclosed in the proceedings of the Court of Yohogania County now published, to have the oath of allegiance to the State of Virginia administered to all the inhabitants of the Monongahela and Ohio valleys, within the limits of the actually exercised jurisdiction of Westmoreland County, Pennsylvania.¹

Why are the records of these old Virginia courts found in the vaults of the court-house of Washington County, Pennsylvania? A reply to this question may be made as follows :

On March 1, 1780, just before the final ratification by Pennsylvania and Virginia of the agreement at the Baltimore Conference, on the establishment of the boundary lines between the two states, and whilst all the territory of Washington, Allegheny, Fayette and Greene counties and of that part of Beaver county south of the Ohio River still formed part of Westmoreland County, erected in 1773, the legislature of Pennsylvania, "first of all the states," says III. Bryant's *Hist. of U. S.*, 177, passed an act for the gradual emancipation of all the slaves within its jurisdiction.² And on March 21, 1781, Washington County was erected, the first new County out of old Westmoreland. Then on April 13, 1782, less than two years after the Virginia courts had ceased to be held within the limits of Pennsylvania, and still before the boundary lines had been actually run on the ground, an act was passed by the general assembly of Pennsylvania, entitled "An Act to redress certain grievances within the Counties of Westmoreland and Washington."³ The preamble to this act recited :

"Whereas a number of the inhabitants of Westmoreland and Washington counties have represented to the General Assembly that they labor under many inconveniences by reason that Before the Boundary was agreed to between the States of Virginia and Pennsylvania, many of the inhabitants aforesaid, conceiving themselves under the jurisdiction of Virginia, which exercised judicial authority over them, had taken and subscribed the oath of Allegiance and Fidelity as prescribed by the laws and the usages of the said State, [and] are considered in many respects as not entitled to all the rights of free citizens of this State; and but for the reason above mentioned they have had no opportunity

¹See the Order of Court on August 26, 1777, and 9 Henning's *Statutes* 281.

²See Act of March 1, 1780, II. Carey & Bioren, 246; I. Dall. L., 838; I. Smith's L., 492.

³This act is not found at length in any of the editions of our Pennsylvania laws, but see it noted as obsolete in I. Dall. L., p. 55.

of entering or registering their slaves agreeable to the Act of Assembly of this State for the gradual Abolition of slavery ; and that a number of the records and papers containing the proceedings of the late counties of Yohogania, Monongalia and Ohio are now in the hands of the late Clerks, who are not authorized to give exemplified copies thereof : ”

Then followed enacting sections providing that all the inhabitants of Westmoreland and Washington counties, whose names should be found in the records thereafter mentioned, having and producing to the clerks of the General Quarter Sessions of the said counties respectively “ certified copies or certificates of their having taken the Oath of Allegiance and Fidelity to the State of Virginia before the said Boundary was agreed to, shall be and they are hereby declared to be to all intents and purposes free citizens of this state ; ” and further providing that all such inhabitants “ who were on the 23rd day of Sept., 1780,¹ possessed of Negro or Mulatto slaves or servants until the age of thirty one years,” might register such slaves or servants under said act for the gradual abolition of slavery, “ on or before the 1st day of January next ; and the said master or masters, owner or owners of such slaves or servants shall be entitled to his or their services as by the said act is directed, and the said slaves and servants shall be entitled to all benefits and immunities in the said act contained and expressed.” Then followed the final section :

“ *And be it further enacted by the authority aforesaid,* that the Clerks of the Orphans’ Courts, the Registers of the probates of Wills and granting letters of administration, and the Recorders of Deeds, for the respective counties of Westmoreland and Washington aforesaid, shall be authorized and empowered to call on the late clerks of the said counties of Yohogania, Monongalia and Ohio, for all such papers and records in their custody or possession, which relate to or affect the taking of the oath or affirmation of Allegiance, the probates of wills, granting letters of administration, and the Recording of Deeds or other indentures of Bargain and Sale, of any of the inhabitants of the said counties of Westmoreland and Washington, and when they shall receive all or any part of the said papers and records as aforesaid they shall be lodged within their respective offices and become part of the records of said counties ; and the said Clerks are hereby required

¹ The day of the final ratification by Pennsylvania of the final agreement for the boundary lines ; VIII. Penna. Archives, 570.

and enjoined on demand as aforesaid to deliver up intire and indefaced all such papers and records as aforesaid, and in case they or either of them shall refuse or neglect to deliver up the papers and records in manner and form aforesaid, they or either of them so neglecting or refusing shall forfeit and pay the sum of five hundred pounds, to be recovered by action of debt in any court of Common Pleas within this Commonwealth, for the use of the same.

“Signed by order of the House,

“*Fred^k A. Muhlenburg, Speaker.*”

Monongalia and Ohio counties, Virginia, did not become extinct, but were pushed out of Pennsylvania by the boundary lines established, and carried their records with them. The records of the courts at Fort Dunmore and for Yohogania County, thus became a part of the official records of Washington County, Pennsylvania.

By reference to the record of the formal organization of the old Fort Dunmore court, Vol. I., p. 525 of these *Annals*, it is seen that that court was constituted under “His Majesties Writ,” issued by Lord Dunmore, “for adjorning the County Court of Augusta from the Town of Staunton to Fort Dunmore, and with a new Commission of the Peace,” which included George Croghan and fourteen others named after him, all of whom resided in the Monongahela and Ohio valleys, as “Gentlemen, Justices.” The creation of that court was by the will of King George as expressed by his colonial representative, Lord Dunmore. But there came a time when His Majesty’s writs by whomsoever issued were inoperative west of the Alleghenies, as well as east of them to the Atlantic; and, as noted briefly on p. 520, Vol. I. of these *Annals*, the legislature of Virginia, now become an independent commonwealth, in October, 1776, passed An Act for ascertaining the boundary between the County of Augusta and the District of West Augusta, and for dividing the said District into three district Counties.

This act, to be found at length by the reference in the note,¹ established the southern boundaries of the District of West Augusta, and proceeded:

“And to render the benefits of government and administration of justice more easy and convenient to the people of said District, Be it enacted, &c., That from and after the 8th day of November next en-

¹ Chapter XLV., 9 Henning’s Statutes, 262. See our map of the District of West Augusta, facing p. 518, Vol. I. of these *Annals*.

suing all that part of said District lying within the following lines, to wit: Beginning at the mouth of Cross Creek, thence up the same to the head thereof, thence southeastwardly to the nearest part of the ridge which divides the waters of the Ohio from those of the Monongahela, thence along the said ridge to the line which divides the county of Augusta from the said District, thence with the said Boundary to the Ohio, thence up the same to the beginning, shall be one distinct county and be called and known by the name of *Ohio County*.

“And all that part of the said District lying to the northward of the following lines, viz: Beginning at the mouth of Cross Creek, and running up its several courses to the head thereof, thence southeastwardly to the nearest part of the aforesaid dividing ridge between the waters of the Monongahela and Ohio, thence along the said ridge to the head of Ten Mile Creek, thence east to the road leading from Catfish-Camp to Redstone Old Fort, thence along the said road to the Monongahela River to the said Fort, thence along Dunlap’s old road to Braddock’s road and with the same to the meridian of the head fountain of the Potowmack, shall be one other distinct county and shall be called and known by the name of *Yohogania County*.

“And all that part of the said District lying to the northward of the county of Augusta, to the westward of the meridian of the head fountain of the Potowmack, to the southward of the county of Yohogania, and to the eastward of the county of Ohio shall be one other distinct county, and shall be called and known by the name of the *County of Monongalia*.

“And for the administration of justice in the said counties of Ohio, Yohogania and Monongalia, after the same shall take place, Be it enacted, &c., That after the said 8th day of November, courts shall be constantly held every month by the Justices of the respective Counties, upon the days hereafter specified for each county respectively, that is to say: For the County of Ohio, on the first Monday, for the County of Monongalia on the second Monday, and for the County of Yohogania on the fourth Monday in every month, and in such manner as by the laws of this Commonwealth is provided for other Counties, and as shall be by their Commission directed.”¹

A subsequent section of this Virginia statute provided that the court of Yohogania County should have jurisdiction to hear and determine all actions and suits, both at law and in equity, which should be

¹ See Crumrine’s “History of Washington County,” p. 183 and notes.

“depending” before the Court of West Augusta at the time the said jurisdiction should take place. And it was further enacted,¹ that the landholders of the said counties, respectively, should meet on the 8th day of December next, those of the County of Yohogania “at the house of Andrew Heath, on the Monongahela”; those of the County of Monongalia “at the house of Jonathan Corbin [Coburn] in the said county”; and those of the County of Ohio “at the house of Ezekiel Dewit in the said County,” then and there to choose the place of holding courts for their respective counties.

Jonathan Coburn lived about ten miles southeast of New Geneva, in what is now Fayette County, and the place chosen for holding the courts of Monongalia County was the plantation of Theophilus Philips, about two miles above New Geneva, on the upper Monongahela, and here the courts of that county were held until the establishment of the boundary line, when, to get them out of Pennsylvania, they were removed to the plantation of Zachwell Morgan, afterwards Morgantown; but the early records of this court were lost in the burning of the court-house at Morgantown in 1796. The place chosen by the landholders of Ohio County for the holding of the court for that county was Black’s Cabin, on Short Creek, now West Liberty, West Va., and the first court held there was on January 6, 1777. There these courts continued to be held until 1797, when they were removed to Wheeling.

Whether the election required to be held on December 8, 1776, at the house of Andrew Heath (near what is now West Elizabeth, Allegheny County, Pa.), to choose a place for holding the court for Yohogania County, was held at the time and place appointed is not known; but, whatever the fact, there is now room for the belief, from a more careful study of the records of that court here produced, that, from its first session on December 23, 1776, until on August 25, 1777, when it was ordered “That the court be adjourned to the house now occupied by Andrew Heath,” the court for Yohogania County continued to be held at Augusta Town, now Washington, Pa., and that it was then removed to its new and last place of holding on the Monongahela.

We now submit to the student of western Pennsylvania history a full verbatim transcript of the records of the long since extinct court of Yohogania County, to be illustrated hereafter, it is hoped, by a collection of explanatory notes, identifying persons and places mentioned.

¹ 2 Henning’s Statutes, 264, 265.

Benja^a Kuykendall Geo: Logan

Samuel Newell

H^W Crawford Edw^W Hare

Isaac Cox

John Canon

John Campbell

William Goe

George Vallen Digham

Thos Mallman Jr. Connolly.

Richard Yeates

ORGANIZATION ; FIRST DAY'S BUSINESS.

(1)¹ Yohogania County, Dec. 23, 1776.

In consequence of an Act of the General Assembly of Virginia putting off all that part of the District of West Augusta Northward of the following bounds or lines (viz :) Beginning at the mouth of Cross Creek, running up the several courses thereof to the head ; Thence South-Easterly to the nearest part of the dividing ridge Between the Ohio and the Monongahela Rivers, Thence along the said Dividing Ridge to the head of Ten Mile creek, Thence East to the road leading from Catfish camp to Redstone Old Fort, Thence with the said road to the Monongahela River, Thence across the said River to the said Fort, Thence along Dunlap's old road to Braddock's Road, and with said road to the meridian of Potowmac River, — and a Commission of the Peace and a Commission of Oyer and Terminer, Directed to John Campbell, Edward Ward, Thomas Smallman, Dorsey Pentecost, John Gibson, William Crawford, John Stephenson, John Cannon, George Vallandingham, William Goe, John Neaville, Isaac Cox, John McDowell, Richard Yeates, John McDaniel, George McCormick, Philip Ross, Benjamin KirKindall, William Harrison, Samuel Newell, Thomas Brown, Thomas Freeman, John De Compt, Joshua Wright, Oliver Miller, Benjamin Frye, Matthew Richie, Andrew Swearingen, Jacob Haymaker, Benjamin Harrison, and Zachariah Connell ; Also a Dedinus Potestatum, directed to William Goe, John Neaville and Isaac Cox, or any two of them, to administer the oath prescribed by law to John Campbell, Edward Ward, Thomas Smallman, Dorsey Pentecost, John Gibson, John Cannon and George Vallandingham, or any two of them, and they to administer the aforesaid oath to the aforesaid Justices.

Whereupon the aforesaid William Goe and Isaac Cox administered the aforesaid oath to the aforesaid Dorsey Pentecost, who thereupon did administer the aforesaid oath to the aforesaid Richard Yeates, George McCormick, Benjamin KirKindall, Samuel Newell, William Goe, Isaac Cox, Thomas Freeman, Joshua Wright, Oliver Miller, Benjamin Frye, Matthew Richie, Andrew Swearingen and John Cannon, as Justices of the Peace.

¹ The marginal figures in () represent the original paging of these records.

- (2) The court then proceeded to the election of their clerk, whereupon the said Dorsey Pentecost Esquire was unanimously chosen and appointed their Clerk, and ordered to take charge of their rolls.

Dorsey Pentecost took the oath Prescribed by Law as Clerk of this court.

The court demanded the Records and Papers from John Madison, Junior, Deputy Clerk of East Augusta, in whose custody they are, Which he Peremptorily refused, Notwithstanding he confessed he had seen an Act of assembly directing him so to do.

Edward Ward, gentleman, came into court and prayed that the court would receive his reasons for refusing to act as Sheriff of this county, which was granted and were as follows:—That he cannot think of acting as Sheriff, or appointing any under Sheriffs, until the line Between the States of Virginia and Pennsylvania are fixed or limited, for on the North Eastern Bounds of this County There is still a Door open for dispute and Contention, which has been heretofore the cause of Disturbing the Peace of the People Settled and claiming alternately The Jurisdiction of each Government, and before he can think of acting or any Person under him, he proposes praying the General Assembly to have a Temporary line fixed between them, or the limits of Pennsylvania run, or the Government of Virginia Peremptorily running the same, until which is done he cannot think of acting in any state or Government to Infringe on the reserved rights of his fellow subjects; he further assures that when Government has this done, he is ready to act with Cheerfulness, and if this Cannot be done he begs that the Court will Recommend some other gentleman to his Excellency to serve as sheriff,—and hopes the Court will acquiesce in Promoting the having the above bounds ascertained; and further offers to qualify into the Commission of the Peace.

- (3) The Court is of opinion that the said Edward Ward, gentleman, may be Permitted to Qualify into the Commission of the Peace, they being of opinion that he is no sheriff untill he enters into Bond before this Court, and comply with the Tinner of his Commission as Sheriff; Whereupon the said Edward

Ward came into Court and took the oath of a Justice of the Peace.

The Court is of opinion that Joshua Wright Gentleman is a proper person to be recommended to his Excellency the Governor to serve as Sheriff, the whole of the above gentlemen named in the Commission of the Peace who are qualified refusing to act in said office on account of the great difficulty they apprehend will attend the execution of said office until such time as a line is fixed Between this Commonwealth and the state of Pennsylvania.

Brice Virgin is appointed Constable to serve the Insuing year and that he be Summoned before Richard Yeates Gentleman to be qualified into said office.

Richard Elson is appointed constable to serve the Insuing year, and that he be summoned before Isaac Cox, Gentleman, to Qualify into said office.

William Lankford is appointed Constable to serve the Ensuing year and that he be summoned before Matthew Richie Gentleman to be Qualified into said office, as also

John Alexander is appointed Constable to serve the Ensuing year, and that he be summoned before Matthew Richie Gentleman to Qualify into said office.

Samuel Clerk is appointed Constable to serve the Ensuing year, and that he be summoned before William Goe, Gentleman to Qualify in said office.

Samuel Griffith is appointed Constable to serve the Ensuing year, and that he be summoned before William Goe Gentleman to qualify into said office.

Isaac Sparks is appointed Constable to serve the Ensuing year, and that he be summoned before Thomas Freeman, Gentleman to Qualify into said office.

Also John Brown, James Buorass, Matthew Hays, ——— Bradley is appointed Constables to serve the Ensuing year, and that they be summoned before Edward Ward, Gentleman to Qualify into said office.

(4) William Gaston is appointed Constable to serve the Ensuing year, and that he be summoned before Andrew Swearingen, Gentleman to Qualify into said office.

Wm Hays is appointed Constable to serve the Ensuing year

and that he be Summoned before John Cannon, Gentleman to be Qualified into said office.

John Johnston is appointed Constable to serve the Ensuing year, and that he be summoned before Joshua Wright Gentleman to Qualify into said Office.

Josiah Orsborn and Philip Philips is appointed to Serve as Constables the Ensuing year, and that they be summoned before Samuel Newell Gentleman to Qualify into said office.

Andrew Dye & Peter Austurges is appointed Constables to Serve the Ensuing year, and that they be summoned before Benjamin Frye, Gentleman to Qualify into said Office.

John Beans is appointed Constable to serve the Ensuing year, and that he be summoned before Oliver Miller, Gentleman to Qualify into said office.

Ordered that Dorsey Penticost Esquire be recommended to his Excellency the Governor as a proper Person to have the Command of the Melitia of this County ; and that John Cannon be a proper Person to be recommended as Colonel of the said Melitia ; Isaac Cox be recommended as Lieutenant Colonel of said Melitia, and Henry Taylor, Major of said Melitia.

Ordered that the Clerk forward a letter to his Excellency & Council, notifying the general dissatisfaction of the people of this County against the late Election¹ being held on the Sabath day, the short notice of the said election, and of the Inconvenience of the Bounds circumscribing the said County.

(5) Whereas by an act of the General Assembly the Suits &c brought and Instituted in the Court of the District of West Augusta are directed to be determined in this Court, and the Papers and Records relative thereto are now in the hands of John Maddison, Junior, Deputy Clerk of East Augusta, who hath this day been Called upon to deliver the said Papers and records to this Court, which he, the said John Maddison, in contempt of the said Act and the demands of this Court refuses to deliver, to the manifest Injury of Individuals and evident hurt of the Publick : Ordered, therefore, that a Process be Issued to apprehend the said John Maddison and forthwith bring him before this Court to answer the above misdemeanor.

Court adjourned until Court in Course. EDW^d WARD.

¹ This was perhaps the election held on December 8, to choose a place for holding the court.

Court met on Monday the 28th of April 1777, according to adjournment to Court in Course.

Present: Edward Ward, John Cannon, John McDowell, Richard Yeates, Benjamin Kirkindall, Joshua Wright, Oliver Miller and Andrew Swearingen, Gentlemen Justices.

On the Court's meeting and the Sheriff's Commission not coming to Mr. Joshua Wright, agreeable to recommendation of the Court and notwithstanding Colonel Penticost's letter to Colonel Cannon, Insuring him he had a Sheriff's Commission for Mr. Wright, he refused to act Protempory. Therefore the Court was reduced to the necessity of appointing another, as there was an Election to be held for a Senitor and Delegates, and a Criminal to be tried and other Breeches of the Peice.

The question being first put to Mr. Joshua Wright, to be appointed Protempory, and he refused, notwithstanding his hearing of the Commission as aforesaid; but said if his commission had came to this Court he would have sworn into said Office.—The Question then being put to the rest of the Court, who would serve as Sheriff, and all refused to, Except Mr. William Harrison, who agreed to be appointed, and the Court unanimously agreed that the said Mr. Harrison be recommended as a proper Person for Sheriff and Mr. Joshua Wright concurd with the Court.

The Court is of the opinion that William Harrison, Samuel Newell and Thomas Freeman are proper persons to be recommended for Sheriffs the Insuing year.

William Harrison came into Court and took the oath as Sheriff.

(6) Court adjourned Tuesday 7 O'Clock.⁹

Court met according to adjournment.

Present: Edward Ward, John Cannon, John McDowell, Richard Yeates, Benjamin Kirkindall, Joshua Wright, Oliver Miller, Andrew Swearingen, Gentleman Justices.

Zacheriah Connell came into Court and took the oath of Justice of the Piece.

The Court Still Labouring under great difficulty for the want of a Clerk, as Colonel Dorsey Penticost our former Clerk lying

⁹ 7 o'clock !

in Baltimore in the Small Pox. The Court then applied to Mr. James Innis, who the said Colonel Penticost had appointed to serve as Clerk in his absence, and when application was made to said Mr. Innis, he refused to attend the Court; his answer was that he only agreed to attend the March Court—upon which the Court Choose Mr. Isaac Cox for their Clerk who Came into Court and swore into said Office.

Zachariah Connell, William Lee and Andrew Heth came into Court and took the Oath of Captains of the Militia.

John Cannon Came into Court and took the Oath as Colonel of the Melitia.

Henry Taylor came into Court and took the oath of Major of the Melitia.

Joshua Wright was applied to by the Court to Swear into his Captain's commission, but he refused as he was a Lieutenant of a former Nominal Company.

John Meligan being charged with Felloniously Murdering William Guttery and being Convicted for the same, was brought into Court, and he acknowledged he was guilty of the Crime he stod charged with, and the Court is of Opinion that the said Crimminal for said felony ought to be sent to the general Court for farther Trial.

(7) John Melony and Samson Beavers, Securities for Joseph Ross, for his appearance at the Court, as by his recognizance appears, came into the Court and delivered said Ross to the Court, and after the Court had heared the Complaint, was fined twenty five Shellings for swearing four Blasfemous Oaths before John Cannon, one before John Johnston—and ordered that the said Ross give Security for his better Behavior For one year and one day.

John Melony came into Court and agreed to be security for Joseph Ross's keeping the Piece and better Behavior to the Subjects of the Common Wealth, and esspecially to Colonel John Cannon, whome he had threatened to abuse the first opper-tunity. The said security bound in the sum of one Hundred pounds.

Upon the Petition of Benjaman Jones ordered that John Bennitt be summoned to Bring a Boy Claimed by the said Jones to the Next Court.

Samson Beavers come into Court and entered Security for the payment of twenty five Shillings at the laying of the Next Parrish Levey, it being Joseph Ross's fine for swearing.

Court is adjourned untill Wednesday 8 Oclock.

Court met according to adjournment.

Present: Edward Ward, John Cannon, Oliver Miller and Zacheriah Connell, Gentlemen Justices.

The Sheriff came into Court and gave Bond and Security for the true performance of the said office.

John Crow being charged with Breach of the piece, ordered that the said Crow give Security for his Better behavior towards all the Subjects of the Common Wealth, and Especially to Joseph Ross for a year and one day. Henry Taylor and James Austurges enter Security for the same, bound in the sum of one Hundred pounds.

Ordered that the Clerk furnish the Sheriff with all papers necessary for the Tryal of John Milligan at the General Court.

Ordered that the Clerk send down the recommendation for William Harrison to be Sheriff.

Ordered that the Clerk send down by Mr. William Harrison all proceedings of the Court relative to the appointment of the Sheriff and Clerk.

Patrick McGey, Thomas Smyth and James Furgurson being Convicted for Breaches of the piece — Ordered that the said Patrick McGey, Thomas Smyth and James Furgurson give Security to each other, for their better Behaviour for the Space of one year and one day, and also to all the Subjects of the Common Wealth.

Henry Taylor and John McGey enter Security for Patrick McGey and Thomas Smyth.

John Crow and David Williams enter Security for James Furgurson.

- (8) Ordered that Patrick McGey and Thomas Smyth be fined the Sum of two pounds each, and that the Sheriff secure the same and pay it to James Furgurson.

Charles Harrison and William McKee is appointed Constables for the Ensuing year, and that they be Summoned before Zacheriah Connel Gentleman to swear into said office.

The Court adjourned to Court in Course.

At a Court Continued and held for Yohogania County May 26th, 1777.

Present: William Crawford, Benjamin Kirkindall, John McDaniel and Oliver Miller, Gentlemen Justices — The aforesaid William Crawford and John McDaniel being Previously sworn by the aforesaid Benjamin Kirkindall and Oliver Miller, Gentlemen Justices.

Colo Dorsey Penticost came into Court and begged that the Court would consider the Cause of his not attending their Court at their last meeting — he the said Pentecost, Convinced this Court that it was out of his power to attend, he being at that Time confined in the Small Pox — and prayed the Court to reestablish him in his Office as Clerk of their Court. Colonel Isaac Cox who was appointed Clerk of this Court to succeed him, acquiescing in Said Petition, on the Proviso that his Bonds given the Court for the due performance of his Office be given up or Confiscated; the Court is therefore of opinion that the Reasons Offered by the said Pentecost for his non-attendance at Last Court is satisfactory and the Court acquiesces with his and Colonel Cox's request. — And it is accordingly ordered that Colonel Cox's Bond be delivered him and he is hereby released therefrom and that the said Pentecost enter into Bond with this Court for the due performance of his Office, and to Take the Charge of the Rolls of this County as Clerk to this Court.

Colonel Isaac Cox took his seat in Court.

(9) Colonel William Crawford absent.

Thomas Cook came into Court and took the Oath of Captain of the Militia.

John Muchelhaney is appointed Constable to Serve the Ensuing year and that he be Summoned before Benjamin Kirkindall, Gentleman, to Qualify into said Office.

Benjamin Kirkindall (otherwise Called Jorsey Ben)¹ is appointed Constable to Serve the Ensuing year, and that he be Summoned before Oliver Miller, Gentleman, to Qualify into said Office.

Court adjourned untill Tomorrow 9 O'Clock.

ISAAC COX.

¹ Not the Gentleman Justice, but another Benjamin.

May the 27th 1777, Court met according to adjournment.

Present: Isaac Cox, William Crawford, Oliver Miller, John McDaniel, Benjamin Kirkindall and Benjamin Frye, Gentlemen Justices.

Upon the Petition of Benjamin Jones exhibited against a certain John Bennitt for unlawfully detaining his son Enoch Jones, an Infant.

Ordered that the Said John Bennitt deliver the said Boy Enoch Jones unto the said Benjamin Jones, with Such Household furniture as he may have, the property of the said Boy Enoch Jones, and the said Benjamin Jones pay the said John Bennitt the Sum of Six pounds on the delivery of the said Boy Enoch Jones, and that the said John Bennitt deliver unto the said Infant, Enoch Jones, when he arrives at the age of Twenty one years, one good Cow and Calf.

Michael Thorn and Joshua Meeks both come into Court and Took the oath of Captains of the Melitia.

Ordered — That Zacheriah Connell Gentleman, Take in the List of Tithables in the following Bounds, Viz: — Beginning at the head of Maryland and Extending along Bradock's Road To Thomas Gist, Thence with Froman's Road to Byer's Run, (10) thence down the said Run to Yough River, Thence down the said River to the mouth of Swedley Creek, Thence with said Creek and the Northern bounds of the County to the Beginning.¹

Ordered—That Edward Ward, Gentleman be appointed to Take in the List of Tithables within that part of the County Lying West of Swedley Creek East of the Alleghany River & North of the Monaungahela River.

Ordered — That William Goe Gentleman be appointed to take in the List of Tithables within the following Bounds, (Vizt) Beginning at William Castleman's on the head of Little Redstone Creek, Thence on a Strait line to the mouth of Worshington's Mill Run,² Thence down Yough River To its Junction with Monaungahela River, thence up the said River

¹ At this time there were no townships, in Yohogania County at least, created by statutory authority, as in Pennsylvania.

² Doubtless Washington's Mill Run.

Monaungahela to the mouth of Little Redstone Creek, Thence up the said Creek to the aforesaid Willam Castleman's.

Ordered — Thomas Freeman Gentleman be appointed to Take in the List of Tithables within the following bounds (Vizt) : Within that part of the County Lying Between the Laurel Hill and the Monaungahela River, and between the line of this County and the Monaungahela County and the following Line. Vizt — Beginning at the House of Thomas Gist Esquire and extending Along Froman's Road to Byer's Run, Thence down said Run to Yough River, thence Down said River to the mouth of Worshington's Mill Run. Thence on a Strait-line to the House of William Castleman on the head of Little Redstone Creek, Thence down said Creek to its junction.

Ordered — That Benjamin Frye Gentleman, be appointed to Take in the List of Tythables, within the following Bounds, Vizt. Beginning at the mouth of Pigion Creek and running up the said Creek to its fountain, Thence a South Course to the South Line of the County, Thence with said Bounds to the Monaungahela River, Thence down the said River to the Beginning.

(11) Ordered — That Benjamin Kirkindall, Gentleman be appointed to Take in the List of Tithables within the following Bounds (Vizt) Beginning at the mouth of Pigeon Creek and extending up the same to its fountain, Thence a South line to the South bounds of the County, thence with said bounds to the Top of the dividing Ridge Between the waters of the Monaungahela River and Chirteers Creek, Thence along said Ridge to the head of Peter's Creek, Thence down the said Creek to the mouth, thence up the Monaungahela River to the Beginning.

Ordered — That Oliver Miller Gentleman be appointed to take in the List of Tithables within the following Bounds, Vizt. Beginning at the mouth of Peter's Creek and extending up the same to its fountain—thence on a Strait Line to Ezeel Johnston's on Churteer's Creek, thence down the same to its Junction with the Ohio, Thence up the Rivers Ohio and Monaungahela to the Beginning.

Ordered — That Richard Yeates Gentleman, be appointed to take in the list of Tithables within the following Bounds Vizt.

ORIGINAL

Beginning at the mouth of the East fork of Churteers Creek and Extending up the same to Ezekiel Johnston's, Thence on a Strait Line to the head of Peter's Creek, Thence along the dividing ridge between Churteer's Creek and the Monaungahela River to the South line of the County, Thence along said line to the middle or main fork of Churteer's Creek, Thence down said Creek to the place of Beginning.

Ordered — That Andrew Swearingen Gentleman be appointed to Take in the List of Tithables within the following bounds, (Vizt) Beginning at the mouth of the West fork of Churteer's Creek and Extending up the same to the Top of the deviding ridge Between Churteer's and Cross Creeks, Thence along said Ridge to the South Line of the County, thence along said Line to the Main fork of Churteer's Creek, Thence down the same to the Beginning.

(12) Ordered — That John McDaniel Gentleman be appointed to take in the List of Tithables within the following Bounds, (Vizt) Beginning at the mouth of the West fork of Churteer's and extending up the Said Fork to the Top of the Dividing Ridge Between Churteer's Creek and Cross and Raccoon Creeks, Thence down the Said ridge to the head of Robertson's run, Thence down the said run to Churteer's Creek, thence up the said Creek to the Beginning.

Ordered — That Samuel Newell Gentleman be appointed to Take in the List of Tithables within the following Bounds, Vizt — Beginning at the mouth of Churteer's Creek and extending up the same to the mouth of Robertson's run, Thence up said run to Croghan's Line, Thence with said line to Raccon Creek, Thence down said Creek to the Ohio, Thence up said River to the Beginning.

Ordered — Matthew Richie Gentlemen be appointed to take in the List of Tithables within the following Bounds, Vizt.— Beginning on the Ohio at the mouth of Raccoon Creek, Extending down said River to the mouth of Indian Creek, Thence up the same to its fountain, Thence on a Strait Line to Thomas Rogeres on Raccoon Creek, Thence down the same to the Beginning.

Ordered — That Isaac Cox Gentleman be appointed to Take in the List of Tithables within the following Bounds, (Vizt) —

Beginning at the mouth of Cross Creek and extending up the same to the head, thence along the dividing ridge between Cross, Raccoon and Churteer's Creeks to Croghan's line, Thence with said line to Raccoon Creek, Thence up the same to Thomas Rogers's, Thence on a Strait line to the head of Indian Creek, Thence down the Same to Ohio River, Thence with the Said River to the Beginning.

An Execution Issued by Edward Ward Gentleman against Samuel Ewalt, ordinary keeper, for keeping a disorderly House. The Sheriff returns Executed and five pounds ready to render — Ordered That the Sheriff retain said money in his hands untill the Laying the next Levy.

Abraham Dale

vs Debt — Alias Capias.

Richard Elson

[2 folios, 4 pages missing]

(17) The last Will and Testament of Jacob Lamb deceased was proved by the oaths of John Crow and John Wright to of the subscribing Witnesses. George Kintner came into Court and Took the oath of Executor of the Last Will and Testament of Jacob Lamb deceased, and entered into Bond for his performance according to Law with John Crow and John Wright his securities.

Upon the Representation of Alen Tharp and Wife, that a Certain Michael Humble did forcibly and with a Strong hand Carry away from them, the Complainants, five of their Children. Ordered — That the said Michael Humble forthwith deliver the said Children to the aforesaid Alen Tharp and Wife.

Ordered — That the Court be adjourned untill Tomorrow 7 Oclock in the forenoon.

ISAAC COX.

June 25th 1777, Court met according to adjournment.

Present : John Campbell, Isaac Cox, Richard Yeates, Thomas Freeman, Oliver Miller and Zacheriah Connell, Gentlemen, Justices.

Ordered — That the Sheriff cause to be Erected a pair of Stocks, and a Whiping post in the Court-House yard by next Court.

Upon the information of Zacheriah Connell, Gentleman, That James Johnston did this day swear two profane oaths and two profane Cusses — Ordered, That the said James Johnston be fined Twenty Shillings, Currant money for the same.

Upon the information of Isaac Gox Gentleman that James Johnston did this day swear three profane Oaths and one profane Curse — ordered, That the said James Johnston be fined Twenty Shillings Currant money for the same.

- (18) Upon the information of John Campbell Gentleman That James Johnston did this day swear four profane oaths, ordered — That the said James Johnston be fined one pound Currant money for the same.

Ordered — That Richard Yeates and Isaac Leet be appointed to meet two Gentlemen to be appointed by the Court of Monaungahela County, at the House of Captain Reason Vergin's on the forth day of August Next, to run the line agreeable to Act of Assembly between this County and the said County of Monaungahela.

Ordered — That Richard Yeates and Isaac Leet be appointed to meet two Gentlemen to be appointed by the Court of Ohio County at the House of William Shearer's, on the head of Cross Creek, on the first day of August next to run the line between this County and the said County of Ohio agreeable to Act of Assembly.

Ordered — That the Court of Monaungahela be requested to appoint two gentlemen of their County to meet two Gentlemen already appointed by this Court at the House of Captain Reason Vergin's, on the forth day of August next, to run the line Between this County and the said County of Monaungahela, agreeable to act of assembly.

Ordered — That the Court of Ohio County be requested to appoint two Gentlemen of their County to meet two Gentlemen already appointed by this County at the House of William Shearer's, on the head of Cross Creek, on the first day of August next to run the Line between this County and the said County of Ohio agreeable to act of assembly.

Ordered — That Court be adjourned untill Court in Course.

ISAAC COX.

(19) At a Court Continued and held for Yohogania County August 25th 1777.

Present: Isaac Cox, Richard Yeates, Thomas Freeman, John McDowell and Zachariah Connell Gentlemen Justices.

Ordered: That for Conveniency of Seting and Expediting Business, That the Court be adjourned to the House now occupied by Andrew Heath.¹

ISAAC COX.

At the House of Andrew Heath, Court met according to adjournment.

Present: John Campbell, Isaac Cox, Richard Yeates, Thomas Freeman, John Cannon, John McDowell, John McDaniel and William Goe, Gentlemen Justices.

The last Will and Testament of Job Robins was proved by the oaths of Joseph Brown and Joseph Sprouce, the two Subscribing Witnesses and ordered to be recorded.

Benjamin Custard and Rebekah Robins came into Court and Took the oath of Executors of the Estate of Job Robins deceased and entered into Bond with Gabriel Cox and Zadock Wright their Securitys.—

Ordered—That David Cox, John Trumbo and Thomas Spencer or any two of them being first sworn do appraise the Estate of Job Robins deceased and Return the Inventory to next Court.

Bargain and Sale, Jonathan Plummer to Henry Heath, was acknowledged by the said Jonathan Plummer party thereto and ordered to be recorded.

Zachariah Connell Gent, Plaintiff

vs

In Case

Samuel Wells, Defendant

(20) This day the plaintiff by his attorney, and Edmond Lindsey personally appeared in Court and undertook for the said Defendant, That in Case he shall be Cast in this Suit that he shall pay and satisfie the condemnation of the Court or render his Body to Prison in Execution for the same or that he the said Edmond Lindsey will do it for him, whereupon the said Defendant prays and hath leave to Imparle untill next Court and then to plead.

¹ Had the court theretofore been held at Augusta Town?

Jacob Bauseman produced a Commission as Captain of the Melitia which being read, The said Jacob Bauseman Came into Court and Took the Oath of Captain of the Melitia.

George Vallandingham, Gentleman named in the Commission of the piece Came into Court and took the Oath of Justice of the Piece.

Edward Ward, Gent., Plant

vs

In Case

Joseph Wells, Defendant

This day came the plaintiff by his attorney, and Thomas Freeman Gentleman, personally appeared in Court and undertook for the Defendant that in Case shall be Cast in this Suit, that he shall pay and Satisfie the Condemnation of the Court or render his Body to Prison in Execution for the same, or that he, the said Thomas Freeman will do it for him, whereupon the said Defendant prays and hath leave to Imparl untill next Court and then to plead

Walter Buscoe Plaintiff

vs.

In Case

Edward Todd, Defendant

(21) This day came the plaintiff by his attorney, and Joseph Wells Personally appeared in Court and undertook for the said defendant that in Case he shall be Cast in this Suit that he shall pay and Satisfie the Condemnation of the Court or render his Body to Prison in Execution for the Same or that he the said Joseph Wells do it for him. Whereupon the Defendant prays and hath leave to Imparle untill next Court and then to plead.

Isaac Leet Came into Court and Took the oath of Deputy Sheriff.

Ordered that John James Wood be appointed Constable to serve the Ensuing year and that he be sommened before William Goe, Gentleman, to Qualify into said Office.

Ordered — That Court be adjourned untill Tomorrow morning Six O'Clock.¹

JOHN CAMPBELL.

August 26th 1777. Court met according to adjournment.

Present: John Campbell, John McDowell, Isaac Cox,

¹ 6 o'clock !

Richard Yeates, John McDaniel, William Goe, Zacheriah Connell, George Vallandingham, Thomas Freeman and John Cannon, Gentlemen Justices.

David McClure by his attorney Complains that Sarah Bresling an Indented Servant was delivered of a Bastard Child within her said Time of Service and the said Sarah Bresling being Called Came into Court and Confessed to the Charge. It is thereupon Ordered by the Court that the said Sarah Bresling doth serve her said Master the Term of one whole Year from the tenth day of October Next (being the expiration of her service by Indenture) to reimburs her said Master for his Loss and Trouble for the same — or that she pay her Master the sum of one Thousand Pounds of Tobacco in Leu of said Service.

(22) Bargain and Sale. Dorsey Pentecost to Samuel and Robert Purviance for Three Hundred and fifty two acres of Land acknowledged by said Pentecost, party thereto and ordered to be recorded.

Bargain and Sale from Dorsey Pentecost to Samuel and Robert Purviance, acknowledged by said Pentecost party thereto and ordered to be recorded for four hundred and Six acres of Land.

Bargain and Sale from Dorsey Pentecost to Samuel and Robert Purviance for three Hundred and Seven acres of Land. Acknowledged by said Pentecost, party thereto, and ordered to be recorded.

Bargain and Sale from Dorsey Pentecost to Samuel and Robert Purviance for one Hundred & Sixty three acres of Land. Acknowledged by said Pentecost, Party thereto and ordered to be recorded.

Bargain and Sale. Dorsey Pentecost to Jesse Hollingsworth for five Hundred and fifty one acres of Land, acknowledged by Said Pentecost, party thereto and ordered to be recorded.

Edward Ward, Gent, Plaintiff

against

In Case

Richard Dunn, Defendant

This day came the Plaintiff by his attorney, and Patrick MuckElroy Personally appeared in Court and undertook for the

said Defendant, that in Case he should by Cast in this Suit that he Shall pay and Satisfie the Condemnation of the Court or render his Body to Prison in Execution for the same, or that he, the said Patrick MuckElroy will do it for him, whereupon the said Defendant prays and hath Leave to Imparl untill next Court and then to plead.

Joseph Wells is appointed Constable to serve the Ensuing year. Whereupon the said Joseph Came into Court and Took the Oath of a Constable.

Oliver Miller Gentleman, Justice Present.

- (23) Upon the Petition of Paul Froman, Setting forth that he is desirous of Building a Water Mill on Mingo Creek at the mouth Thereof; and praying an order to view and Condimn one Acre of Land on the opposite Side from said Froman's Land for that Purpose,

Ordered—That the Sheriff be Commanded to Sommon twelve Freeholders of his Vissinage to meet on the aforesaid land and they being first Sworn Shall diligently View and Examine the said Land which shall be Effected or Laid under Water by the Building Said Mill with the Timber and other conveniences thereon, and that they report the same to Next Court with the True Value of said acre of Land Petitioned for and of the Damages done the Party holding the same.

William Brashers produced a Bond Payable from Thomas Hamilton to Andrew Swearingen for five hundred pounds Currant Money with a Condition to deliver to this Court the Body of a Certain Robert Hamilton, which he hath not fulfilled.

Ordered—That the said Bond be put in Suit against the said Thomas Hamilton.

Ordered: That the following Gentlemen be Appointed to make a Tour of the Different Districts hereafter mentioned, and Tender the Oath of Allegience and Fidelity to this Common Wealth to all free Male Inhabitants, agreeable to an Act of Assembly Intitled an act to oblige all the free Male Inhabitants above a Certain age to give assurance of allegience to this state and for other purposes, Therein Mentioned.¹

Ordered—That Matthew Richie, Gentleman, be appointed

¹ For the act itself see 9 Hening 281.

for the above purpose within the following Bounds, Viz:—Beginning at the mouth of Cross Creek and up the same to the Dividing ridge Between said Creek, Raccoon and Churteer's Creeks; thence along said Ridge to Croghan's Line; thence with said Line to Raccoon Creek; thence up the same to Thomas Rogers's; thence on Strait Line to the head of Indian Creek; thence down the same to the Ohio; thence down the said River Ohio to the Beginning.

- 24) Ordered:—That Samuel Newell, Gentleman, be appointed for the above purpose within the following Bounds, Viz:—Beginning at the mouth of Churteer's Creek, extending up the same to the mouth of Robertson's run; thence up the said Run to Croghan's Line; thence with said Line to Raccoon Creek; thence down Said Creek to the Ohio; thence up the same to the Beginning.

Ordered:—That John McDaniel, Gentleman, be appointed for the above purpose within the following Bounds, Viz: Beginning at the mouth of the West fork of Churteer's Creek, Extending up the said fork to the top of the dividing ridge, Between Churteer's Creek, Cross and Raccoon Creeks; thence along Said ridge to the head of Robertson's run; thence down said Run to the Churteer's Creek; thence up the said Creek to the Beginning.

Ordered:—That Andrew Swearingen, Gentleman, be appointed for the above purpose within the following Bounds, Viz: Beginning at the mouth of the West fork of Churteer's Creek and Extending up the same to the Top of the dividing ridge Between Churteer's Creek and Cross Creek; thence along said Ridge to the South Bounds of the County; thence with said Bounds to the Main Fork of Churteer's Creek; thence down the same to the Beginning.

Ordered:—That Isaac Cox, Gentleman, be appointed for the above Purpose, within the following Bounds, Viz: all that part of the County Lying west of Sweedly Creek, East of the Allegheny River, & North of the Monaungahela River.¹

Ordered—That Oliver Miller, Gentleman, be appointed for The above purpose within the following Bounds, Viz: Begin-

¹This indicates that the jurisdiction claimed extended well up northeast of Pittsbura

ning at the mouth of Peters Creek and extending up the same to the head, thence a Strait Line to Ezekeel Johnston's on Churteer's Creek, thence down the same to the mouth ; Thence up the Ohio and the Monaungahela River to the Beginning.

Ordered : — That Benjamen Kirkindall, Gentleman, be appointed for the above purpose within the following Bounds,
 (25) Vizt : — Beginning at the mouth of Pigeon Creek, Extending up the same to the head, Thence a South Line to the South Bounds of the County, thence with said Bounds to the Top of the dividing ridge between the waters of the Monaungahela River and Churteer's Creek, Thence along said ridge to the head of Peters Creek, thence down the same to the Monaungahela River, thence up the same to the Beginning.

Ordered : — That William Goe and Thomas Freeman, Gentlemen, be appointed for the above purpose within the following Bounds, Vizt : — Beginning at the mouth of Little Redstone Creek and Extending up the same to the House of William Castleman's, Thence on a Strait line to the mouth of Worshington's Mill run, thence up Yough River to the mouth of Byer's run, Thence up said Run to Froman's Road ; Thence along said road to Thomas Gist, Esquire, Thence along Laurel Hill to Dunlap's old road, Thence with said road to the Monaungahela River, Thence with said River to the Beginning.

Ordered : — That Zacheriah Connell, Gentleman, be appointed for the above purpose within the following Bounds, Vizt : Beginning at the head of Maryland and extending along Bradock's Road to Thomas Gists, Esquires ; Thence with Froman's Road to head of Byer's Run ; Thence down said Run to Yough River ; Thence down the same to mouth of Sweedley Creek ; Thence with said Creek and North Bounds of the County to the Beginning.

Ordered : — That Benjamen Frye, Gentleman, be appointed for the above purpose within the following Bounds, Vizt : Beginning at the Mouth of Little Redstone Creek extending up the same to the House of William Castleman ; Thence on a Strait Line to the mouth of Warshington's mill run ; Thence down the river Yough to the Monaungahela ; Thence up the same to the Beginning.

Ordered : — That Richard Yeates, Gentleman, be appointed

for the above purpose within the following Bounds, Vizt: Beginning at the mouth of Pigeon Creek and Extending up the same to its fountain; Thence South to the South Bounds of the County; thence with said bounds to the Monaungahela River; Thence down said River to the Beginning.

(26) Ordered: — That John Inks [illegible], Benjamin Wells, John White, Jun, Henry Boyles, Samuel Clerk, Samuel Griffith, William McKee, John Brown, Isaac Sparks, Peter Austerges, John James Wood, and Brice Vergin, be appointed Constables to serve the Ensueing year, and that they be Sommoned to attend Next Court (or the Nearest Justice) to Qualify into said Office.

Ordered: — That the Sheriff Call on Mr. John Anderson, of Pittsburg, or any other person, for the papers and records belonging to the District of West Augusta, and that the said Sheriff give the said Mr. John Anderson, or any other person who may deliver the said Records, a Receipt for the same; and that he deliver the said Papers and Records to the Clerk of this Court, who is also ordered to give the said Sheriff a Receipt for said delivery.

Robert Hamilton, a prisoner in the Sheriffs Custody, came into Court and in the grocest and most Impolite Manner Insulted the Court, and Richard Yeates, Gentleman, in particular: Ordered, That the Sheriff confine the feet of the said Robert Hamilton in the lower rails of the fence for the space of five minutes.

Ordered: — That any prisoner or prisoners the Sheriff have, Shall be Confined in the guard or some other room in Fort pitt, with the acquiesance of General Hand, untill such Time as a proper goal can be provided for the County.

Ordered: — That Isaac Cox, Oliver Miller and Benjamin Kirkindall, be appointed, or any two of them, to Contract with a proper person or Persons, to Build a Goal and Court house in the following manner, and at the following place, Vizt: The Goal and Court House are to be Included in one whole and Intire Building, of round sound Oak, to go Twenty four feet Long and Sixteen feet wide; two Story high; The lower Story to be eight feet high, Petitioned in the Middle;

- with Squared hewed Logs with Locks, and bears to the door and Windows, according to law, which Shall be the Goal.
- (27) The upper Story to be five feet high in the Sides, with a good Cabbin Roof, with Convenient seats for the Court & Bar, and a Clerk's Table, to remain in one room, with a pair of Stairs on the outside to Assend up to said Room, which Shall be place for holding Court ; with two floors to be laid with strong hewed logs ; the whole to be Compleat and finished in one month from the date hereof. The said Building to be Erected on the plantation of Andrew Heath at Such Convenient place as the said Isaac Cox, Oliver Miller & Benjamen Kirkindall, Gentlemen, or any two of them shall think Proper.

Ordered — That John McDowell, Gentleman, be appointed to Take a Tour within the following Bounds, and Tender the oath of allegience and Fidelity to the State, to all free male Inhabitants within the same, above sixteen years of age, agreeable to act of Assembly: Beginning at the mouth of the East fork of Churteer's Creek and Extending up the same to Ezekil Johnston's ; Thence on a Strait Line to the head of Peter's Creek ; Thence on the Top of the Deviding Ridge Between the Monaungahela River and Churteer's Creek to the South Bounds of the County ; Thence with said Bounds to the Main fork of Churteers Creek Thence with said Creek to the Beginning.

Ordered — That the Court be adjourned to 6 Oclock Tomorrow Morning.

JOHN CAMPBELL.

August 27th Court met according to adjournment.

Present: John Campbell, Richard Yeates, William Goe, George Vallandingham, John McDowell, Isaac Cox, Thomas Freeman, Oliver Miller, Zacheriah Connel, John Cannon & John McDaniel, Gentlemen Justices.

- (28) Alexander Bowling against William Poston. Pluries Capias.
Alexander Bowling against Francis Morrison. In Case. Plur. Capias.

Christian Summitt against John Golliher and wife. In Slander, Plurious Capias.

Thomas Rankin against Jeremiah Standsbury. In Case, Alias Capias.

David Day against Jacob Hedricks. In Case. Alias Capias.

John Lydea against Joseph Cox. In Case. Alias Capias.

Matthew Dale against Richard Elson. In Case, Alias Capias.

Benjamin Jones against Patrick McDaniel. In Case. Plurious Capias.

William McMahan against John Greathouse. In Case, Plu. Cap.

Daniel Swigert against Benjamin Newgent. Atteachment, Continued for want of Prosecution.

Peter Reasoner against Davis Ruth. In Case. Alias Capias.

— Shillings against Spencer Collins. In Case. Alias Cap.

Dorsey Pentecost against Christopher McDaniel. Debt. Alias Cap.

Burr Harrison against William Williams. In Case. The Sheriff Returning agreed, Ordered that the Suit be Demised.

Joseph Lindsey

vs. In case

George Long The Sheriff having Returned that the Defendant is not in his Bailliwick, Ordered That This Suit be dismissed.

Zacheriah Connell against Abraham Vaughan. In Case. Ali. Cap.

Richard McMahan against John Trumbo. In Case. The Sheriff returning Executed and agreed and the Plaintiff not appearing, though Solemnly Called, Ordered to be dismissed for Non Procedendo.

Zacheriah Connell against Providence Mounce. In Slander. The Sheriff Returns Executed. Ordered that said Suit be Continued.

Zacheriah Connell

against In Slander.

John Lindsey The Sheriff returns Executed, Ordered that Said Suit be Continued.

Ignaw Labat
against In Case.

John Bradley The Sheriff returns agreed, Ordered that this
Suit be dismissed.

(29) Hugh Sterling against Mordicai Richards. In Assault.
Alias Capias.

Ignaw Labat, Plaintiff
against In Debt.

Thomas Girty Defendant The Sheriff returns that the De-
fendant Is not with in his Bailliwick. Ordered that the Suit
be Dismissed.

David Wilson against Henry Bowling. In Case. Alias
Capias.

Alexander Sumrall Jun
and Thomas Jack Plaintiffs
against In Case

Walter Summerall, Defendant Alias Capias.

John Worshington against James Poor. Ejectment. Or-
dered to be Continued.

John Spivey against Samuel Beeler. In Case. Alias Capias.

Richard Yeates, Plaintiff
against In Case

Brice Virgin, Defendant ordered to be Dismissed at Plain-
tiff's request.

Richard Waller Plaintiff
against In Debt

John Earskin, Defendant The Sheriff returns agreed Or-
dered that This Suit be Dismissed.

Dorsey Pentecost, Plaintiff
against In Debt

James Poor Defendant upon the Petition of the Plain-
tiff Seting forth that the Defendant Stands Justly Indebted to
him four pounds Ten Shillings Courant Money refuseth pay-
ment.

The said James being Solemnly Called & failing to appear the Plaintiff produced a Note of hand Bearing Interest from the fifteenth day of December 1774, four pounds Ten Shillings with Credit on said Note for Two pounds Three Shillings and six pence. It is Considered by the Court that Plaintiff recover against the said James the Defendant for two pounds six Shillings and six pence with Interest from the said fifteenth day of December untill paid, with his Costs about this Suit in that behalf Expended.

Ordered — That Execution be Staid on this Judgment untill next October Court.

(30) Ordered — That the following Gentlemen be recommended to his Excellency the Governor as proper persons to be added to the Commission of the piece, Vizt, Isaac Leet, Senior, Joseph Beeler, Sen. John Carmichael, James Rogers, Isaac Meason, James McLane, James Blackstone, Joseph Becket and Joseph Vance, Gentleman.

Ordered: — That the Majestrates appointed to make the Tour of the County and Tender the oath of allegiance and Fidelity, Shall also Take in the Numbers in Each Family within their Respective districts, In order to enable the justices to make an Equal distribution of the salt, and make return to October Court.

Zacheriah Connell against Abraham Vaughan. In Case. Ali. Cap.

Ordered — That Isaac Cox Gentleman be recommended to his Excellency the Governor as a proper person to Serve as Lieutenant Colonel of the Militia of this County, In the Stead of Thomas Brown Gentleman who hath refused to Serve.

Ordered — That Court be adjourned Till Court in Course &c.

JOHN CAMPBELL.

At a Court continued and held by Adjournment September 22d 1777.

Present: Isaac Cox, William Goe, Oliver Miller, Joshua Wright, Gentlemen Justices.

Ordered that Isabel Pegg be appointed Administratrix of all the Goods, Chattles and Credits of the Estate of Garret New Gill deceased. She complying with the Law. Whereupon

the said Isabel Pegg with James Wright her Surety, Came into Court and Entered into Bond for the Performance of the Said Administration. Isabel Pegg came into Court and took the Oath of Administratrix of the Estate of Garrett New Gill, deceased.

- (31) Ordered that John Wall, Benjamin Collends & John Cox or any two of them being first Sworn do appraise all the Estate of Garret Newgil decd and make return to the Next Court.

A Bargain and Sale from Gabriel Cox to James Swolevan of three hundred Acres of Land acknowledged by the said Gabriel party thereto and ordered to be recorded.

William Taylor produced a Licence appointing him to preach the Gospel after the Manner of his Sect; which being read, the said William Taylor came into Court and took the Oath of fidelity and Allegience to this Commonwealth.

John Gibson came into Court and took the Oath of Ensign of Militia.

John Campbell Gent took his seat in Court.

Alex Sumrall & Thos Jack

Walter Sumrall

This day came the Plff, and William Anderson personally appeared in Court and undertook for Said Deft that in Case he shall be cast in this Suit he shall pay & Satisfy the Condemnation of the Court or render his body to prison in Execution for the same or that he the said William Anderson will do it for him. Whereupon the Deft prays and hath leave to imparl untill the next Court and then to plead.

Ordered that the Court be adjourned to tomorrow at 7 oClock.

JOHN CAMPBELL.

- (32) September 23d 1777. The Court met pursuant to adjournment.

Present: John Campbell, Isaac Cox, William Goe, Oliver Miller, Gentlemen, Justices.

The last will and Testament of Johathan Reed was proved by the Oaths of Noah Flehearty and Hugh McCreedy, two of the subscribing witnesses and ordered to be recorded.

John Cannon, Joshua Wright & Matthew Richey Gentlemen Came into Court and took their Seats.

Robert Bowers being charged with a breach of an act of the Common wealth intituled an Act for the punishment of certain Offences being Called, pleads Not Guilty. Then came a Jury, to wit. James Swolevan, James Wall, Charles Bruce, James Campbell, William Marshall, Joseph Becket, John Crow, Zadock Wright, Edward Cook, Gabriel Cox, Andrew Heath and John Douglass, and being sworn say that the said Robert Bowers shall suffer One year's Imprisonment.

David England, being charged with a breach of an act of Assembly of this Commonwealth, intituled an Act for the punishment of Certain Offences, Came into Court and Confessed the Charge. Then came a Jury, to wit James Swolevan, James Wall, Charles Bruce, James Campbell, William Marshall, Joseph Becket, John Crow, Zadock Wright, Edward Cook, Joseph Bealer, Andrew Heath & John Douglass, and being sworn say that they find forty Shillings.

- (33) John Teague and George Corn are allowed two days attendance each as Witnesses in behalf of the Common Wealth against David English.

Joseph Beeler Gent. is appointed Administrator of all the Goods, Chattles and Credits of the Estate of John Hutcheson, deceased, he complying with the Law. — Whereupon the Said Joseph Beeler with Christopher Beeler Came into Court and entered into Bond for the due performance of his said Administration.

Joseph Beeler Came into Court and took the Oath of Administrator of Joseph Hutcheson deceased.

Ordered — That Richard Antis, William Powell and James Burns or any two of them they being first sworn to appraise the Estate of John Hutcheson deceased and Make Return to Next Court.

Benjamin Kirkindall Gent Justice Took his Seat in Court.

Andrew Swearingen

Thomas Hambleton This day came the Plff, and Robert Hamilton personally appeared in Court and undertook for the Defendant that in Case he Shall be Cast in this Suit he Shall

pay and Satisfy the Condemnation of the Court or render his Body to Prison in execution for the same, or that he, the said Robert Hamilton will do it for him. Whereupon the said Deft prays and hath leave to imparl untill next Court and then to plead.

William Brashiers

Robert Hambleton This day came the Plff, and Thomas Hambleton personally appeared in Court and undertook for the Defendant that in Case he shall be Cast in this Suit he Shall pay and Satisfy the Condemnation of the Court or render his Body to Prison in Execution for the Same or that the said Thomas Hambleton will do it for him. Whereupon the Deft prays and hath leave to imparl untill next Court and then to plead.

- (34) Moses Davison Stands charged with Hog stealing. Ordered that the said Moses Davison be bound over to Next Grand Jury Court with one Security in the Sum of £25 each.

Whereupon the said Moses Davison and William Colvin his Surety Came into Court and Entered Bail as aforesaid.

Sarah Reed, Joseph Becket and Edward Cook, Executors of the last will and Testament of Jonathan Reed deceased with Joseph Beeler Christopher Beeler and Paul Froman, their securities came into Court and entered into Bond for the true performance of the said Executorship. Whereupon the said Sarah Reed Joseph Becket and Edward Cook took the Oath of Executrix and Executors of the last will and Testament of said Jonathan Reed Deed.

Ordered that Benjamin Davis Samuel Burns John Wright and Dorsey Pentecost or any two or more of them, being first sworn to appraise the Estate of Jonathan Reed deceased and make Return to Next Court.

Joseph Allen being Charged with a Breach of an act of Assembly of this Common Wealth intituled an act for the Punishment of Certain Offences being Calld Came into Court and pleads Not Guilty—Then came a Jury, to wit: James Swolevan, James Wall, Charles Bruce, James Campbell, William Marshall, Andrew Heth, John Crow, Joseph Becket, Zadock Wright, Joseph Beeler, Edward Cook and John Douglass, and saith that the said Joseph Allen is Not Guilty.

- (35) Eliezer Brown being Charged with a Breach of an Act of Assembly of this Common Wealth intitled an act for the punishment of certain Offences—being Called comes before the Court and pleads, Not Guilty. Whereupon came a Jury, to wit: James Swolevan, James Wall, Charles Bruce, James Campbell, William Marshall, Andrew Heath, John Crow, Joseph Becket, Zadock Wright, Joseph Beeler, Edward Cook and John Douglass, who upon their Oaths say that the said Eliezer Brown is Not Guilty.

Thomas Estill, being charged with a Breach of the Act of Assembly of this Commonwealth, intitled an act for the punishment of Certain Offences, who being Called upon Comes into Court and pleads Not Guilty; Whereupon, a Jury being Sworn, to wit: James Swolevan, James Wall, Charles Bruce, James Campbell, William Marshall, Andrew Heath, John Crow, Joseph Becket, Zadock Wright, Joseph Beeler, Edward Cook, and John Douglass, do say they find for the Commonwealth Twenty Pounds Current Money.

Philip Tabor, Charged with being guilty of a Breach of an Act of Assembly of this Common Wealth intitled an act for the punishment of Certain Offences, being called comes into Court and pleads Not Guilty. Whereupon Come a Jury to wit, James Swolevan, James Wall, Charles Bruce, James Campbell, William Marshall, Andrew Heth, John Crow, Joseph Becket, Zadock Wright, Joseph Beeler, Edward Cook & John Douglass, who upon their Oaths do say the Said Philip Tabor is Not Guilty.

- (36) Upon the Petition of Adam Wickerham setting forth that he is desirous of Building a Water Mill on Mingo Creek about three quarters of a Mile from the mouth and that he owns all the Lands that will be effected or overflowed by the building of the said Mill. It is therefore Considered by the Court that the Said Adam Wickerham have leave to build and compleat a mill at the place aforesaid.

Upon the Petition of Paul Froman setting forth that he is desirous of building a Water Mill on Mingo Creek at the mouth thereof and praying an Order to view and Condemn one acre of Land on the opposite side of the Creek to said Froman's Land for that purpose.

Ordered that the Sheriff be Commanded to Summon twelve good and lawful freeholders of the vicinage to meet on the premises aforesaid and being first sworn shall diligently view and examine the said Lands which may be affected or laid under water by the Building Said Mill with the Timber and other Conveniences thereof, and that they report the same to next Court under their hands and Seals with the true value of the one acre of Land Petitioned for and of the damage done to the party holding the Same.

Ordered that John Campbell, Gent., be requested to furnish the wife of Lemuel Davis, a poor Soldier now in the Continental service from this State, for the Support of herself and three Children, the Sum of four pounds per Month, to Commence from the said Lemuel Davis's March from this County.

(37) Ordered that the provision made for the Children of Edward McCawley, by a former Order of this Court, Shall commence from the time of his March from this Country, and that the funeral Charges of one of the said Children since dead be paid by the said Mr. Campbell, and that this Court do draw on the Treasury of this Commonwealth for the payment of the Same.

A letter from General Hand addressed to Col. Campbell questing that Capt. Alexander McKee's Parole given to the Committee of West Augusta be given up to him, the said General Hand, in order to enable him to put Capt. McKee on a New Parole, as he finds it necessary to remove said Alexander McKee. Ordered that the said Parole be given up to General Hand and that he deposit a Copy of the New Parole to be taken from the said Capt. McKee in Lieu thereof, Certified by the said General Hand.

Ordered that a Dedimus be issued to take the Evidence in behalf of the Common Wealth, against John Beall, as well on behalf of said John Beall as on the Common Wealth.

Sarah Norris

Attachment

Charles Norris

These parties came into Court and request that this Action may be referred to Michael Rawlins, Thomas Keith and Andrew Swearingen Gent. It is therefore accordingly ordered by the

Court that the said Suit be referred to the said Michael Rawlins, Thos Keith and Andrew Swearingen or any two of them, they being first sworn diligently examine the Case and make return in writing to next Court, of their Judgment which Shall be considered the Judgment of the Court.

Ordered that the Court be adjourned to 7 oClock tomorrow morning.

JOHN CAMPBELL.

- (38) The Court met according to Court in Course at the house of Mr. Andrew Heath Octo 27th 1777.

Present: John Campbell, Isaac Cox, Joshua Wright, Richard Yeates, Gentlemen Justices.

Ordered that the Court be adjourned to the new Court House.¹

JOHN CAMPBELL.

The Court met at the Court House pursuant to adjournment.

Present: John Campbell, Isaac Cox, Richard Yeates, Joshua Wright, Benj Kerkendal, Andrew Swearingen, Samuel Newell, Gent. Justices.

A Bargain and Sale from Michael Kintner and Catherine his wife to Daniel Dozier for 200 acres of Land, acknowledged by said Michael Kintner and Catherine his wife and ordered to be recorded.

Jacob Feagley

v

Hugh Brawdy This day came the Plaintiff, and James Wright personally appeared in Court and undertook for the said Defendant that in Case he shall be Cast in this Suit, he shall pay and Satisfy the Condemnation of the Court or render his Body to Prison in execution for the same or that he the said James Wright will do it for him, whereupon the said Defendant prays and hath leave to imparl untill next Court and then to plead.

- (39) Peter Resner

v

Daviss Ruth This day came the Plaintiff, & David Leffergy personally appeared in Court and under took for the said De-

¹Ordered on August 26th, to be built in one month.

fendant that in Case he shall be Cast in this Suit he shall Satisfy the condemnation of the Court or render his body to prison in Execution for the same, or he the said David Leffurgy will do it for him, whereupon the Said Defendant pleads and hath leave to imparl untill next Court and then to plead.

Ordered, that Jno Campbell, Gent., be requested to furnish the Wife of Richard Jaines, a poor Soldier in the Continental Service from this State, with the sum of four pounds per month, for the Support of herself and three Children, and this Court do draw on the Treasurer of this Common Wealth for the payment of the Same.—The same to commence one month prior to this date.

John Campbell, gent. absent.

Ordered that Mrs. Knox, the wife of ——— Knox, a poor Soldier in the Continental Service from this State, be allowed the Sum of three pounds per month, for the Support of herself and three Children, to commence from the date hereof, and that this Court do draw on the Treasurer of this Common Wealth for the payment of the Same.

Ordered that Mary Douthard, the wife of Thomas Douthard, a poor Soldier from this State in the service of the United States, be allowed four pounds per month, for the Support of herself and Six Children, to commence one Month prior to this date, and that this Court draw on the Treasurer of this Commonwealth for the Same.

(40) Ordered, that the wife of Abram Ritchey, a poor Soldier in the Continental Service from this State, be allowed three pounds per month for her Support and three Children, and that the Court do draw on the Treasurer of this Commonwealth for the payment of the same

Ordered that the sum of Two pounds per month be allowed the wife of William Ritchie, a poor Soldier now in the Continental Service from this State for the Support of herself and two Children, and that this Court draw on the Treasurer of this Commonwealth for the payment thereof.

A Deed of Partition, John Connolly to John Campbell Gent bearing date the Sixth day of February, one Thousand seven hundred and seventy-six, proved by the Oath of Thomas Flinn one of the Subscribing Witnesses and that he saw Joseph West-

more, Charles Matheson, and James Millegan Sign their names thereto as Witnesses.

Ordered that the Court be adjourned to tomorrow morning at eight O'Clock.

ISAAC COX.

(41) The Court met according to adjournment.

President: John Campbell, Richard Yeates, Andrew Sweringen, Samuel Newell, Gentlemen Justices.

Ordered, that the Inhabitants of this County have leave to Inoculate for the Small Pox, at their own houses or such other convenient Places as they may think proper.

Zelphia McClean

v

Thomas Palmer This day came the Plaintiff, and John Palmer personally appeared in Court and undertook for the Defendant that in Case he shall be Cast in this Suit he shall Satisfy the Condemnation of the Court or render his body to prison in execution for the Same or that he the said John Palmer will do it for him. Whereupon the said Deft prays and hath leave to imparl untill next Court and then to plead.

On the Petition of Sarah Sample setting forth that Ann McClean hath detained a Servant Girl, Ann Brook, to the great Damage of the said Petitioner. Ordered that a Subpona do issue to summon the said Ann to the next Court.

Alexander Bowlin

v

In Case

William Poston Upon the testimony of Isaac Leet and the Debt being under fifty dollars and the said Defendant being in the Continental Service, Ordered that this Suit be dismissed at Plff's Cost.

(42) Benjn Kerkendal and Isaac Cox Gent Present. John Campbell, Gent. absent.

The Commonwealth

v

David Duncan

Recognizance on Assault on Mary McCallister.

On hearing the Evidence, Ordered that the said David Duncan be bound over to answer the said Complaint of Elizabeth

McCallister in behalf of the Commonwealth exhibited against him, whereupon the said David with Zadock Wright his Security came into Court and acknowledged to be indebted to Patrick Henry Esq Gov &c for the use of the State to be levied &c the sum of £25 each conditioned for the personal appearance of the said David at the next Grand Jury Court to be held for this County &c

Joshua Wright, John Campbell Gent. Present.

On the Recognizance of James Fleming and John Gibson (packhorse man) the parties not appearing being Solemnly called Ordered the same to be put in Suit.

Isaac Leet, Deputy Sheriff, in behalf of the high Sheriff of the County, entered his protest against the Goal of this County, he conceiving the same not sufficient to confine Prisoners.

Ordered that the Sheriff pay Colo Isaac Cox the sum of Thirty pounds to be applied towards the pay for building the Court house and Goal, and Andrew Heth pay five pounds now retained in his hands for Samuel Ewalts, fine for keeping a disorderly house to the said Sheriff.

(43) Ordered that Ann Brook a Servant to Sarah Sample be and remain with her mother Ann McClain untill next Court.

Ordered that the Court be adjourned to tomorrow morning at 8 O'Clock.

JOHN CAMPBELL.

The Court met in pursuant to adjournment Oct 29th 1777.

Present: John Campbell, Isaac Cox, Samuel Newell, Richard Yeates, Andw Swearigen, Gentlemen Justices.

Ordered that the Sheriff do Summon a Grand Jury to attend next Court.

Zacheriah Connell, Gent. Then came the Plff, and Nathaniel Brown Richard Yeates Gent personally appeared in Court and undertook for the said Defendant that in Case he shall be Cast in this Suit He shall pay and satisfy the Condemnation of the Court or render his Body to Prison in Execution for the Same or the said Richard Yeates will do it for him. Whereupon the said Defendant prays and hath leave to imparl till next Court and then to plead &c

The Commonwealth

v

The Prosecution not appearing

Jacob Judy

Ordered to be dismissed.

Upon the Petition of David Day against Jacob Hendricks on Request of the Parties Ordered that this Suit and all other Suits now depending in this Court between the said Parties be referred to John Smith, William Campbell and William Vance, they being first sworn and make return to next Court.

(44) The Commonwealth

In Breach of the peace.

y.

David Stone & Jas Davis

James Fleming Pross

Then came the parties and upon hearing their Allegations,
Ordered to be dismissed at the Plff's Cost.

The Commonwealth

In Assault & Battery

y

John Bradley

David Irwin Pros.

Ordered that the Prosecutor David Irwin and the Deft John Bradley give Security for their good behavior towards all the good Subjects of this Commonwealth till the next Grand Jury Court. Whereupon the said David Irwin with David Stone his Security and John Bradley with James Scott his Security acknowledged to owe to Patrick Henry Esq Gov & the sum of £20 each to be levied &c conditioned as per the order of the Court and that they dot depart the Court without leave &c

Alexander Bowling

y

Then came the Plff, and James Scott

Francis Morrison personally appeared in Court and undertook for said Defendant that if he Shall be Cast in this Suit he shall pay the Condemnation of the Court or render his body to Prison in execution for the same, or he, the said James Scott will do it for him, whereupon the said Deft. prays and has leave to imparl untill next Court and then to plead, &c.

The Last will & Testament of Joseph Kirkwood deceased was proved by the Oaths of Nicholas Little and Geo Gillespie two of the Subscribing Witnesses and ordered to be recorded.

(45) James Allison and Margaret Kirkwood came into Court and took the Oath of Executor and Executrix of the Estate of

Joseph Kirkwood, deceased, whereupon the said James Allison and Margaret Kirkwood with George Gillespie and John McDowell, their Sureties come into Court and enter into Bond for the due performance of their said trust.

Ordered that Nicholas Little, Patrick McCollock and Patrick Scott or any two of them, being first sworn do apprais the Estate of Joseph Kirkwood deceased, and make return to next Court.

John Campbell, Gent. Absent.

John Ramage with William Ramage his Security come into Court and acknowledged to be indebted £500 conditioned for the appearance of the said John Ramage at a Court to be held the 5th day of November next for the Examination of the said John Ramage.

Ordered that the Treasurer of this Commonwealth pay to Colo John Campbell, the sum of ninety eight pounds current money to reimburse him, the said Colo Campbell, for money already furnished the wives and Children of poor Soldiers from this County, now in the Continental Service & for the farther Support for three months next ensuing, and that the Clerk draw on the treasury in favor of said Campbell, for the afore-said sum of £98 0 0 Current money.

William McMachen

v

In Case

John Greathouse Then came the parties and at the request of the Plff Ordered that this Suit be dismissed.

John Campbell Gent. Prest.

(46) Bazil Brown

v

Robert Hamilton Then came the Plff, and Thomas Hamilton personally appeared Court and undertook for Sd Deft, that in Case he should be Cast in this Action, he Shod pay and Satisfy the Condemnation of the Court or render his Body to prison in Execution for the same or he the said Thomas Hamilton will do it for him, Whereupon the said Defendant prays and has leave to imparl untill next Court and then to plead.

Ordered that this Court be adjourned to tomorrow morning at 8 oClock.

JOHN CAMPBELL.

October 30th 1777 The Court met Pursuant to Adjournment.

Present: John Campbell, Isaac Cox, Andw Sweringen, Richd Yeates, Gentlemen Justices.

Ordered that the Clerk issue a Summons for Christian Brooks, Daniel Rysher and Michael Rysher to appear before the next Court to be held for this County to give Testimony against Conrad Winniller in behalf of the Common Wealth.

Joshah Wright Gent. Present.

(47) Ordered, that Isaac Cox, Oliver Miller and Benjamin Keykendal, Gent, or any two of them, be appointed to contract with a proper person or persons to build a sufficient Stone Chimney in the Court house and Goal, to be carried up in the middle of the Building, with three fire places, one in each room of the Goal, and one in the part where the Court is held; and to have the Court Rooms chunked and plastered; also a good loft of Clap boards, with a window in each Glebe, and four pains of Glass of ten Inches by eight, and the Goal rooms to be plastered.

Thomas Rankins v Jeremiah Stransbury, Case, Agreed.

David Day v. Jacob Hendricks. Ass & Bat. refer'd

John Lydia v Joseph Cox — Slander — Plu. Cap.

Abraham Dale v. Richard Elson — Trespass. — Agreed

Benj Jones v Patrick McDonald. — Ass & Bat. — Plu Cap

Balser Shilling v Spencer Collins — Trespass. Plu Cap.

Dorsey Pentecost v Chris McDonald — Case Plu Cap.

Zacheriah Connell. v Abraham Vaughan. Debt. Plu Cap.

Hugh Serling v Mordecai Richards — Ass & Bat Plu Cap

David Willson v Henry Boling — Debt — Plu. Cap.

John Spivy v Samuel Beeler. Trespass Plu. Cap.

John Gallahar & wife v Christian Summon. Slander. Al Cap.

John Smith v Sarah Dye — Debt — Cont'd

Charles Reno v Lewis Clock — Case — Agreed.

Robert McKeey v Moses Davison Case Cont'd

View of the Jury upon the Petition of Paul Froman returned by the Sheriff and ordered to be recorded

Ordered that the Court be adjourned to the Court in Course.

JOHN CAMPBELL.

- (48) At a Court continued and held for Yohogania county — December 22 1777

Present: Isaac Cox, John McDowell, Richard Yeates, Oliver Miller, Gentlemen Justices.

Inventory of Jonathan Reed deceased returned by the appraisers and ordered to be recorded —

An Attachment, being obtained by Daniel Swigart against Benjamin Newgent, the Constable (John Johnston) having returned that he had executed the said attachment, on one horse, nine head of hogs, and a quantity of Rie in the Sheaf, and the said Benjn Newgent being Solemnly Called and not appearing to replevy the said attached Effects.— The said Daniel Swigart produced an account against the said Benjamin for £24 5 9 Pennsylvania Currency which he proved according to law. It is ordered by the Court that the said Daniel Swigart Plff. recover against the said Benjamin Defendant for Nineteen pounds eight Shillings and Seven pence farthing Current Money of the value of £24 5 9 Pennsylvania Currency Ordered that the Sheriff make sale of the aforesaid Attached Effects and Satisfy the Said Daniel Plff the Judgment and make return thereof.

John Crow took the Oath of Capt of Militia.

Maybury Evans produced a Commission from his Excy the Governor appointing him Lieut of the Militia of this County which being read the said Mayburry came into Court and took the oath of Lieut of Militia.

Ben Keykendal, Gent, Absent.

- (49) Patrick Lafferty came into Court and took the Oath of Ensign of the Militia.

Daniel Williams came into Court and enters himself Defendant in the stead of Casual Ejector in an Ejectment at the Suit of Isaac Vance and Enters &c

Isaac Cox, Gent Absent.

Isaac Cox Gent, having obtained an attachment against the Estate of Richard Richardson for two pounds two Shillings and eight pence, and the Sheriff returns that he has levied the said attachment on a trowel & hammer, and the said Richard Richardson being solemnly called and failing to appear and the said Isaac Plaintiff proved the said account, it is considered by

the Court that the said Isaac Plaintiff recover against the said Richard Defendant the said sum of two pounds two Shillings and eight pence. Ordered that the Sheriff make sale of the aforesaid attached effects to Satisfy the said Judgment and make return thereof.

Ordered on Motion of John Crow, his mark a Crop in the Left Ear and a Swallow fork in the right, be recorded.

Ordered that the Ear mark of Jacob Shillings a half Crop in the left Ear and a Crop and a half Crop in the right Ear be recorded.

Ordered that the mark of Richard Yeates a Crop and under keel in the left ear and two slits in the right year be recorded.

Ordered that the Ear mark of Olliver Miller, Gent a hole in the left year and two Slits in the right ear be recorded.

Ordered that the Court be adjourned to tomorrow morning at 9 oClock.

ISAAC COX.

(50) . Dec 23d 1777. The Court met according to adjournment. Present: John McDowell, Isaac Cox, Richd Yeates, Oliver Miller, Gentlemen Justices.

The mark of Mayberry Evans a Swallow fork in the right ear and a Slit in the left. on motion of said Mayberry Ordered to be recorded.

The mark of Richard Evans, a Swallow fork in the right ear and a Crop in the left ordered to be recorded.

The Ear Mark of William Anderson two under half Crops on motion ordered to be recorded.

The Mark of Michael Teggert a crop and three Slitts in the left Ear, on motion of said Michael ordered to be recorded.

Bill of Sale Alexander Young to Joseph Wherry for 300 Acres of Land acknowledged by said Young party thereto ordered to be recorded.

On the Complaint of James Murphy and wife that a certain Jacob Jones hath for some time past forcibly detained George Alervine, the son of the wife of the said James Murphy to the great damage of the said James and Wife and against the peace and dignity of the Common Wealth. Ordered that the Said

Jacob Jones forthwith deliver the said George Alervine to the said James Murphy and wife.

Charles Morris

v

In Debt

Thomas Rouse On Motion of Plff Ordered that this Suit be dismissed.

- (51) On the Petition of Andrew Heath &c, Ordered, that Robert Henderson, Zadock Wright, John Robertson, John Crow, Thomas Applegate and Andrew Dye, view a road, the nearest and best way from Pittsburg to Andrew Heaths ferry on the Monongahela River, and from thence to Becket's fort.

Upon the motion of Andrew Heath, ordered that he have leave to keep a ferry at his house across the Mongahala River.

Benn Kekendal Wilm Goe, Gent present.

On the Information of Oliver Miller Gent. that William Dunaghgan did on this day swear two prophane Oaths Ordered, that the said William William Dunaghgan be fined 10s for the same.

Oliver Miller Gentleman returns five Shillings received from Martin Owens for Swearing. Ordered that the Sheriff receive the same.

Isaac Leet returns that he hath received five Shillings from James Johnston for prophane swearing. Ordered that the Said Isaac Leet, Sheriff retain the same in his hands.

Thomas Dickenson came into Court and enters himself Defendant in an Action of Ejectment at the Suit of James Roberts.

Inventory of the Estate of Garret Newgill deceased returned by the appraisers & ordered to be recorded.

Bargain and Sale. Paul Froman to Dorsey Pentecost for fourteen hundred acres of Land in this County was proved by the Oaths of James Allison, Isaac Leet, John Crow & John McDowell Gent. also the receipt thereunto annexed was proved by the oaths of the said John McDowell and John Crow, the Subscribing Witnesses to the Said Bargain & Sale & Receipt as aforesaid & ordered to be recorded

- (52) Bill of Sale. Isaac Cox to James Allison for one one thousand acres of Land in the County of Kentucke, acknowledged

by the said Isaac Cox party thereto and ordered to be recorded.

David McClure Then came David McClure The Plain-
v tiff, and John Crow personally appeared
Patrick McElroy in Court and undertook for the said
Defendant that in Case he shall be Cast in this Action he shall
pay and Satisfy the Condemnation of the Court or render his
Body to prison in execution for the same or he the said John
Crow will do it for him. Whereupon the Defendant prays and
has leave to imparl untill next Court and then to plead.

Upon the motion of Oliver Miller Gent on behalf of Catherine Dabler a servant to William Anderson that a certain Peter Brandon of the town of Pittsburgh now unjustly detains an Infant Girl born of the Body of the said Catherine. Ordered that the said Peter Brandon deliver the said Infant to the said William Anderson, it is also ordered to bring the said Infant before the next Court and that a Summons do issue to Cause the said Peter Brandon then to attend to Shew Cause wherefore he detains said Infant.

Ordered, that the Sheriff collect from every Tythable person within this County, the sum of three Shillings as County Levies, and that he account with the Treasury of the Common Wealth for the same.

(53) Ordered that the Sheriff pay John Campbell Gent out of the County Collection, the sum of Eleven Shillings and one penny for holding an Inquisition on the body of John Kelso.

Ordered that the Sheriff of this County pay John Bradley out of the County Collection the sum of four Shillings and two pence, for summoning an Inquisition on the body of John Kelso.

Ordered, that the Sheriff pay out of the County Collection to Richard Yeates, the sum of six pounds for laying two floors in a Goal formerly built for this district.¹

Ordered that the Sheriff pay out of the County Collection to Dorsey Pentecost the sum of Sixty four Pounds ten Shillings and Six pence for Record Books, County Seal, and other papers for the Clerk's office of this County.

¹ Doubtless this "Goal formerly built for this district," was the jail on the late Wm. Gabby farm, at Augusta Town, about half a mile west of Washington.

Zadock Wright produced a commission from his Excellency appointing him Captain of the Militia which being read, the said Zadock Wright came into Court and took the Oath of Capt of the Militia.

The Ordinary Keepers within this County are allowed to sell at the following rates

one half pint wiskey.....One Shilling
 The same into Tody.....One Shilling Six pence
 A larger or lesser Quantity in the same proportion.
 Beer per Quart.....One Shilling
 For a hot Breakfast.....One Shilling & Six pence
 For a Cold Do.....One Shilling
 For a Dinner.....Two Shillings
 Lodging with Clean Sheets pr Night.....Six pence
 Stablidge for one horse 24 hours
 with good hay or fodder.....Two Shillings
 Pasturage for Do.....do.....One Shilling
 Oats or Corn per Quart.....Three pence
 Supper.....One Shilling & Six pence

(54) Ordered that the above rates commence the fifteenth day of January next and not before.

Ordered that this Court be adjourned to tomorrow morning at 7 oClock

WILLIAM GOE

The Court met according to Adjournment December 24th 1777.

Present: Isaac Cox, John McDowell, Richard Yeates, Benjamin Keykendal, Gent. Justices.

Ordered that the Clerk set up a Copy of the Rates of Sale for ordinary Keepers within the County at different public places so as to make it as public as possible.

William Goe and Oliver Miller Gent present

Attachment being obtained by John Campbell and Joseph Simon against the Estate of George Croghan for eight hundred and eighty eight pounds Pennsylvania Currency and the Sheriff of this County having returned that he had levied the said attachment in the hands of William Christy, Frederick Ferry, Geo Litenberger, Colo Archibald Steel, & David Duncan, and attached All the Effects in the hands of the said Garnishees,

(55) and the said George Croghan being Solemnly Called and failing to appear to replevy what effects they have in their hands, the said George Croghan and Robert Campbell factor for the said John Campbell, and Joseph Simon Came into Court and produced an account against the said George Croghan for eight hundred and eighty-eight pounds, due upon Bonds for the payment of four hundred and forty four Pounds Pennsylvania Currency which was proved by the said Robert Campbell. It is considered by the Court that the said John Campbell and Joseph Simon do recover Judgement against said George Defendant for the sum of four hundred and forty four Pounds Pennsylvania Currency of the Value of three hundred and fifty five pounds and four Shillings Virginia Money, with Interest from the 18th day of May 1775 untill paid and his Cost about this Suit in that behalf expended.

Ordered that the said William Christy, Frederick Farrey, George Littenberger, Archibald Steel and David Duncan be summoned to attend the next Court, to shew what effects they have in their hands the property of said George Croghan and that the Sheriff make Sale for an towards Satisfaction of this Judgement and make Return thereof.

Mortgage from John Bowley to John Campbell Esqr bearing date the 14th day of November 1777 for a certain Quantity of Land &c on Shirteer's Creek was proved by the oath of Robert Campbell and Andrew Heath, two of the Subscribing Witnesses and ordered to be recorded.

Ordered, that the recommendation for Militia Officers of the 5th & 6th November last, by the Justices of this County, be confirmed as the Opinion of this Court, and they do hereby Confirm the proceedings of the said Justices respecting the Same, as the distressed Situation of this County demanded the particular attention of the said Justices at that time.

Ordered, that Gabriel Cox be recommended to his Excellency the Governor as a proper person to serve as Major of this County in the stead of Henry Taylor who has resigned his Commission.

(56) Ordered that the Sheriff William Harrison retain in his hands the sum of Seventeen pounds Seven Shillings part of the County Collection for Conveying John Millegan a Criminal to the Public Goal and other contingencies.

Ordered that the Sheriff Collect from Joseph Ross the sum of Twenty Shillings which was adjudged his fine for swearing last April term.

Ordered that the Sheriff deliver Colo Isaac Cox the sum of Eighteen pounds to pay Paul Mathews due him as a Ballance for building the Court house and Goal.

Upon the motion of William Harrison, Gent, ordered that the Clerk issue a Summons to Call John Stephenson, Thomas Gist, Joseph Beeler and Edmund Rice before the Court, to testify and the truth say what they know respecting the marriage of Catherine Harrison with Isaac Mason, on the part of the said Catherine.¹

Masterson Clark obtained Judgment against Joshua Baker for Thirty one pounds Pennsylvania Currency. John James Wood Constable returns he has attached a Black horse and one Cow, and the Sd Joshua failing to appear to replevy the said attached Effects the Plff produced a Note of hand against the said Joshua Defendant for Thirty one pounds Pennsa Currency with Credit on the Back for three pounds two Shillings and six pence like Currency. It is Considered by the Court that the said Master-son Plff recover against the said Joshua Deft the sum of Twenty two pounds Six Shillings Current Money and his Costs about this Suit expended. Ordered that the Sheriff make Sale of the Attached Effects or as much thereof as will be of value Sufficient to Satisfy this Judgment and make return to next Court.

(57) John Campbell and Joseph Simon obtained an Attachment against the Estate of Andrew Scott for four pounds Pennsylvania Currency, who is said to be so absconded that the Ordinary process of Law cannot be Served and the Sheriff having returned that he had levied the said attachment in the hands of Mathew Ritchey and the said Scott failing to appear and replevy though solemnly called and the said Campbell and Simon produced a proved account for the aforesaid four pounds Pennsa Currency, Ordered that the Sheriff make Sale of so much of the Estate of the said Andrew Scott, now in the hands of the said Garnishee as will be sufficient to Satisfy the said Plff for this Judgment of three pounds four Shillings and his Cost in this behalf expended.

¹ See the record of this matter made April 28, 1778, post.

David Ritchey and James Wright produced Commissions from his Excellency the Governor appointing them Captains of the Militia which being read as usual, the said David Ritchie and James Wright came into Court and took the Oaths of Captains of Militia.

John Lydea v Joseph Cox Case, Pl C.

Benjamin Jones v Patrick McDaniel Assault, P. C.

Paulser Shillings v Spencer Collens Trespass, P. C.

Dorsey Pentecost v Christopher McDonald Case, P. C.

Zachariah Connell v Abraham Vaughan Debt, P. C.

David Wilson v Henry Bowling Case, P. C.

John Spivy v Samuel Beeler Case, P. C.

Jno Gallaher & uxr v Christian Summet Slander, P. C.

John Smith v Sarah Dye Debt, Cont'd

Wm Harrison Special Bail.

Joseph Lindsey v Geo Long Debt, Al Cap

Thomas Gist v Henry Boyles Case. A. C.

— Same — v Richard Waller. Case, A. C.

Same v John Hall, Slander, A. C.

(58) Hugh Brady v Jacob Feagley Case, Al Cap.

Richd Swipicks v Jacob Jones, Case, A. C.

Paul Froman v Robert McCrowry Debt, A: C:

Francis Morrison v Daniel Swigart, Debt A: C:

Henry Martin v Sam Patterson & D. Rennels, Debt, A: C:

John Lawrence v Thos Rogers Case, A: C:

Charles Norris v Thomas Rouse Case, dismissed

George Sekley v John Ramage, Case, A: C:

Susannah Sekley v Robert McKinley Case. A: C:

Eli Williams v Philip Taylor Case, A: C:

Thos Freeman, Gent, v Jno James & Saml Lynch, Case,
A: C:

Jacob Bausema v James Bradley Case, A: C

Elizabeth Burriss v Naomi Tampman Case, A: C:

Mary Burriss v Jno Johnson, M. Humble & Al, Case.

A: C:

James Johnston v Godfrey Waggoner — Case, A: C:

Ordered that the Sheriff detain the Sum of six pounds out of the County Collection for his Public Services as by Law allowed.

Ordered that the Sheriff pay the Clerk of the Court the Sum of Six pounds for his Public Service as by Law allowed.

Ordered that the Court be adjourned till the Court in Course.

ISAAC COX.

At a Court continued and held for Yohogania County March 23d 1778.

Present: Isaac Cox, Joshua Wright Thomas Freeman, Benjamin Fry, Gentlemen Justices.

Ordered that Mary Mills be appointed Administratrix of John Mills deceased, she complying with the Law. Whereupon the said Mary Mills came into Court and took the Oath of Administratrix of the Estate of John Mills deceased.

Mary Mills with Joshua Wright and James McMahon came into Court and entered into Bond for her performance as Administratrix of the Estate of John Mills deceased.

Zacheriah Connell and Joshua Wright Gent Present.

Ordered that James Wright, John Wall and John Cox or any two of them being first sworn do appraise the estate of John Mills deceased and make return to this Court.

Ordered that Joseph Tomlinson be appointed administrator of the Estate of Saml Tomlinson deceased he complying with the Law. Whereupon the said Joseph Tomlinson, came into Court and took the Oath of Administrator of the Goods, Chattles and Credits of the deceased and Entered into Bond with John Wall and William Bruce his Securities.

(60) Ordered that Isaac Williams, George Corn, and Robert Jackman or any two of them being first sworn do appraise such of the Estate of Saml Tomlinson deceased as may be found in this County, and that John Mitchell, David Shepeard, James Garri-son and Yeates Conwell, or any three of them, they being first sworn do appraise such of the said Estate as may be found in Ohio County and make Return to next Court.

Joseph Wherry

v

Then Came the Plaintiff and James Paterson personally appeared in Court and undertook for the Defendant that in Case he Shall be Cast in this Suit he Shall pay and Satisfy the Condemnation of the

Court or render himself to prison in Execution for the same or he the said James Patterson will do it for him. Whereupon the said Defendant prays and has leave to imparl untill next Court and then to plead, &c

The last Will and Testament of John Vance deceased was proved by the Oaths of William Crawford and Samuel Hicks two of the Subscribing Witnesses and ordered to be recorded. Whereupon Margaret Vance and Edward Doyle came into Court and took the oath of Executor and Executrix of the Estate of the Said John deceased, and Entered into Bond accordingly.

Ordered that Edward Rice William McKee, Edmund Lindsey and James Blackson or any three of them they being first sworn do appraise the Estate of John Vance and make return to next Court.

Oliver Miller and William Crawford Gent Present.

John Stephenson Gent. named in the Commission of the peace came into Court and took the Oath of Justice of the peace, aforesaid.

Archibald Hall

v

Then came the Plaintiff, and Bazil

(61) Thomas Bonfield Brown Personally appeared in Court and undertook for the Defendant that in Case he shall be cast in this suit he Shall pay and Satisfy the Condemnation of the Court or render his body to prison in Execution for the same, or he the said Bazil Brown would do it for him.

Whereupon the said Defendant prays and has leave to imparl untill nixt Court, when he is to plead, &c.

Joseph Cox

v

Then came the Plaintiff, and Thos Bond-

John Williams field personally appeared in Court and undertook for said Defendant that in Case he was cast in this suit, he should pay and Satisfy the Condemnation of the Court or render his Body to Prison in execution for the same, or the said Thomas Bondfield would do it for him. Whereupon the Defendant prays and has leave to imparl untill next Court when he is to plead

Joseph Cox

v

Then came the Plff, and Francis Hull

Theodore Davis personally appeared in Court and undertook for said Defendant that in Case he was Cast in this Suit he should pay and Satisfy the Condemnation of the Court or render his body to prison in execution for the same, or that he, the said Francis Hull would do it for him. Whereupon the said Defendant prays and has leave to imparl untill next Court when he is to plead.

Sale of the Estate of Garret Newgel deceased returned by the Administratrix and ordered to be recorded.

Thomas Freeman, Gent, produced a Commission from his Excellency the Governor, appointing him Captain of the Militia which being read, the said Thomas came into Court and took the Oath of Captain of the Militia.

Thomas Prather, Levingston Thomas, & Nicholas Christ, produced Commissions from his Excellency the Governor appointing them Lieutenants in the Militia of this County, which being read, the said Thomas Prather, Levingston Thomas, and Nicholas Christ came into Court and took the Oath of Lieutenants of Militia.

Luke Decker and John Johnson produced Commissions from his Excellency the Governor appointing them Ensigns in the Militia, for this County, which being read the said Luke Decker and John Johnson came into Court and took Oath of Ensigns of the Militia.

Thomas Cook

v

Then came the Plaintiff, and John

Levingston Thomas Wall personally appeared and undertook that in Case the Defendant shall be Cast in this Suit, he shall satisfy the Condemnation of the Court or render his Body to the Prison of this County in Execution of the same, or he the said John Wall will do it for him. Whereupon the said Defendant prays and has liberty to imparl untill next Court and then to plead.

John Decamp Gent named in the Commission of the peace came into Court and took the Oath of Justice of the peace.

Bargain and Sale from Samuel Heth to Patrick McElroy for 300 acres of Land, acknowledged by said Heath and ordered to be recorded.

- (63) Upon the Petition of John Rattan, Ordered that Peter Resner, George Berkhimer, Nicholas Christ and David Ritchie, view a Road, the nearest and the best way from the house of Edward Cook crossing the Monongahela river at the house of John Rattan to Zebulon Collins on the Road leading from Perkersons to Thos Egertons, they being first sworn and make Return to next Court.

Richard Yeates and Benj Kirkendal Gent. Present.

Upon the information of Joseph Beeler Gent. that a certain Samuel Wells and Johanna Farrow doth at this time and hath for some time past beat wounded and evilly treated Ann the wife of the aforesaid Samuel. Ordered that the Clerk issue a Subpona to Call the said Samuel Wells and Johana Farrow before the next Court to be held for this County to answer to the above charge and that Joseph Davis and Hannah his wife, John Crawford and Effee his wife, John Minter, Moses White, and Edmond Lindsey be subponed as Witnesses.

Ordered that the Court be adjourned to tomorrow morning at 7 oClock.

W. CRAWFORD.

March 24th 1778, the Court met pursuant to adjournment.

Present : John Campbell, Isaac Cox, Richard Yeates, Joshua Wright, Wm Crawford, Oliver Miller, Zacheriah Connell, John Decamp, Benjn Fry, Thos Freeman, Gentlemen Justices.

Lease Charles Norris to William Nation for two hundred acres of Land acknowledged by said Norris party thereto and ordered to be recorded.

The last Will and Testament of William Chaplin deceased was proved by Charles Bilderback and William Nation two of the subscribing Witnesses and Ordered to be recorded.

- (64) Benj Kirkindal present.

Upon the motion of James Wherry in behalf of Joseph Wherry Plff against John White Deft Ordered that a Dedimus be issued to take the Examination of Thomas McDowell, Mathew Wilson, and William Wilson, Inhabitants of Cumber-

land County in the State of Pennsylvania without being directed to any Particular Majistrates of the Said County.

John Campbell Gentlemen objects to the above Order.

John Stephenson Gent present.

Upon motion of John Jackson, Ordered that his mark, a Crop and slit in the near Ear and under slit in the right Ear be recorded.

Upon motion of George Rowler, Ordered that his Mark, two Swallow forks in the left Ear and two half pennys in the Right be recorded.

Ordered that Lettice Griffeth be appointed Administratrix of the Estate of Edwd Griffeth deceased she complying with the Law. Whereupon the said Letice came into Court with John Wall and James Wright her Security and entered into bond and took the Oath accordingly.

Ordered that William Rice John Smith Nathaniel Brown and Henry Daniel do appraise all the Goods, Chattles and Credits of Edward Griffeth and make return to next Court.

James McGoldreck, being charged with pulling down and demolishing a Block house erected by Orders of General Hand for the preservation of the Inhabitants at Pittsburg, and the said James being brought into Court Confessed the Charge: Ordered, that the said James be held in One hundred pounds, with two Securities of fifty pounds each, for the appearance of the said James before the next Grand Jury Court, otherwise to remain in Custody by the Sheriff.

(65) John Campbell William Crawford John Decamp Jno McDowell, Benjamin Fry and Benjn Kirkindal Gent, Absent
George Vallandigham Gent, Present.

Bill of Sale. Susannah Nugent to Mordecai Richards proved by the Oaths of Michael Teggart, and Richard Richards, two of the Subscribing Witnesses and ordered to be recorded.

Richard Yeates Gent objects to this Order.

Bargain and Sale. Thomas Marshall to James Parker for a certain tract of Land on the waters of Chirteers. Acknowledged by said Marshall party thereto, and ordered to be recorded.

Bargain and Sale. William Poston to James Ellis for a Survey proved by the Oath of Benjamin Collins one of the

Subscribing witnesses. Ordered that a Dedimus do issue to take the Examination of Catherine Collins a Subscribing Witness to the above Bill of Sale.

Daniel Jacobs came into Court and took the Oath of Lieutenant of the Militia.

Michael Martain produced a Commission from his Excellency the Governor appointing him Lieutenant of Militia which being read as usual the said Michael came into Court and took the Oath of Lieut of the Militia.

Michael Martain enters himself Defendant in an Action of Ejectment at the Suit of the Lessee of John Washington, in the room of the Casual Ejector.

James McGoldreck with Michael Tygert and Robert Henderson his Sureties, the said James in the sum of £100 and the said Sureties in £50 each, for the appearance of the said James before the next Grand Jury Court.

Bargain and Sale James Roberts to Thomas Dickerson acknowledged by said Roberts and ordered to be recorded.

(66) Enoch Springer and Cornelius Manning being summoned as Garnishees at the Suit of William Dunnaighan against Benjamin Newgent came into Court and deposed that the said Springer hath four pounds two shillings Pennsylvania Currency, and the said Manning five pounds five shillings and nine Pence, like money and no more of the Estate of the said Benjamin.

View of a road from the Court house to Pittsburg, returned by Zadock Wright and Robert Henderson, viewers; passing by Zadock Wright's fields on Peters Creek, thence along the dividing Ridge passing the Widow Lapsleys, thence along the Old Road to Stewart's, thence along the old road to Jacob Bousman's; Ordered to be Confirmed.

Ordered that Zadock Wright be appointed Overseer of the Road from the Court house to Martha Lapsley's; Robert Henderson, Overseer of the Road from Martha Lapsley's to Jacob Judy's; and Sebastian Frederick, Overseer of the Road from Jacob Judy's to Jacob Bousman's; and that the Tythable Inhabitants within three miles on each side of said Road work on and keep it in repair together with the Inhabitants of the town of Pittsburg.

William Brashiers

v

In Case. Then came the Plff, Robert

Robert Hamilton Hamilton having been Called failed to appear. Then came a Jury to wit. Gabriel Cox John Hogland, James Wright, Nicholas Christ, Benjamin Vannatre, Jacob Bauseman, William Christy, Pearce Noland, Benjamin Collens, Patrick McElroy, Zadock Wright and David Ritchie, who say they find for Plff Two hundred pounds damages with Costs of Suit.

(67) Bargain and Sale. Isaac Cox to John McDowell for one thousand Acres of Land in Kentucke County, acknowledged by the said Cox and ordered to be recorded.

William Goe Gent. Present.

Bargain and Sale. Isaac Cox to Garrat Vineman for five hundred acres of Land in Kentucke County, acknowledged by said Cox and ordered to be recorded.

Bill of Sale. John Campbell to Ignace Labat for a house and Lot in the town of Pittsburg, acknowledged by said Campbell and ordered to be recorded.

Elizabeth Burris

v

Then Came the Plaintiff, and John

Nahomy Tapman Lydia Personally appeared in Court and undertook for the Defendant that in Case he shall be cast in this Suit she shall Satisfy and pay the Condemnation of the Court or render her body to prison in Execution for the same or he the said John Lydia would do it for her. Whereupon the said Nahomy prays and has leave to imparl untill next Court and then to plead.

Mary Ferry and Samuel Ewalt are appointed Administrator and Administratrix of the Estate of Frederick Ferry deceased they complying with the law. Whereupon the said Samuel and Mary came into Court and took the Oath and Entered into Bond accordingly. Ordered that David Duncan, John Ormsby, and Willm Christy and John Anderson or any three of them being first sworn appraise the Estate of Frederick Ferry deceased and make Return to next Court.

John Lydia

v

Then came the Plff, and and John Douglass

Joseph Cox personally appeared in Court and undertook for

(68) the Defendant that in Case he should be Cast in this Suit he should Satisfy & pay the Condemnation of the Court or surrender his body to the Prison in Execution for the same or that he the said John Douglass would do it for him. Whereupon the said Deft prays and has leave to imparl untill Next Court and then to plead.

James Murphy

v

Then came the Plff, and John Wall personally appeared in Court and undertook for the Defendant that in Case he Shall be Cast in this Action he shall Satisfy the Condemnation of the Court or render his body to prison in Execution for the same or that he the said John Wall will do it for him. Whereupon the said Defendant prays and has leave to imparl untill next Court and then to plead.

John Whitaker, a minister of the Gospel, came into Court and took the Oath of Allegiance & fidelity, as directed by an act of General Assembly, intituled an Act to Oblige the free male Inhabitants of this State, above a certain Age, to give Assurance of Allegiance to the same and for other purposes.

Bargain and Sale. Thomas Cook & Michael Thomas to John McMullen for three hundred and thirteen Acres of Land acknowledged by said Cook and Michael Thomas and ordered to be recorded.

Bargain and Sale. Thomas Egerton to John McDowell, proved by the Oath of Isaac Leet, James Bradford, and James Allison and Ordered to be recorded.

The last Will and Testament of James Pearce decd was proved by the Oath of James Wall, Joseph Warner and Walter Wall, Subscribing Witnesses thereto and ordered to be recorded

Bazil Brown

In Case

v

(69) Robert Hamilton Then Came the Plaintiff and then came also a Jury, to wit Gabriel Cox John Hogland, James Wright, Nicholas Christ, Benjamin Vannatre, Jacob Bousman, William Christy, Pearce Nowland, Patrick McElroy, Zadock Wright, David Ritchie and John Wall, who being sworn say they find for the Plff thirty pounds damages with Costs of Suit.

David Duncan a Garnishee in behalf of John Campbell against George Croghan, came into Court and says on Oath that he hath in his hands One hundred and Seventy nine Bushells and three pecks of Corn for which he has agreed to pay one Dollar per Bushell and no more of the Estate of the said George in his hands.

William Dunaughagain having obtained an Attachment against the Estate of Benjamin Nugent for three hundred and forty seven Pounds ten shillings Pennsylvania Money and the Sheriff having returned that he had levied the Said Attachment in the hands of Enoch Springer and Cornelius Manning and summoned them as Garnishees who this day came into Court and say that they have Nine pounds, fifteen Shillings and nine pence Pennsylvania Currency in their hands and no more of the Estate of the said Benjamin in their hands and the said Benjamin failing to appear and replevy the said Attached Effects tho Solemnly Called the said William produced a Bond against the said Benjamin for the aforesaid Sum of three hundred and forty seven pounds ten shillings Current Money of Pennsylvania. It is considered by the Court that the sd William recover against the said Benjamin the sum of two hundred and seventy eight pounds Current Money with Interest from the first day of October 1777 untill paid with Costs. Ordered that the Sheriff Collect the said money from the said Garnishees and pay it towards Satisfying this Judgment and make return of his proceeding to this Court.

Ordered that a Dedimus issue for the Examination of Eleanor Ackerson witness between John Lydia and Joseph Cox

(70) Ordered that Casper Sickler be allowed two days attendance as a Witness attending Court in the suit of William Brasheers v Robert Hamilton.

Ordered that Thomas Talbert be allowed twelve days as a witness in said Suit.

Ordered that a Dedimus issue for the Examination of John Crow a Witness in the Suit of Hugh Braudy against Jacob Feagley

Upon the motion of Thomas Applegate on behalf of Catherine Dablin now a Servant to the said Thomas that a certain Peter Brandon of the town of Pittsburg now unjustly detains an

Infant Girl born of the body of the said Catherine. Ordered that the said Peter Brandon deliver the said Infant Girl to the said Thomas Appelgate who is ordered to bring the Said Infant Girl here before the next Court to be held for this County.

Mathew Ritchey Gent Present.

Ordered that a Dedimus issue for the Examination of Casper Sickley a Witness in Behalf of William Brashiers against Robert Hamilton.

Upon Motion of Thomas Hamilton in behalf of Robert Hamilton praying a New Tryal and farther Hearing in the Suit of William Brashiers against Robert Hamilton. It is the Opinion of the Court that the Said Suit be reheard

William Brashiers

v

Then came the Plaintiff, and personally

(71) Robert Hamilton appeared Thomas Hamilton and under took for the Defendant that in Case he shall be cast in this Suit he shall Sstisfy and pay the Condemnation of the Court or render his body to prison in Execution for the same or he the said Thomas would do it for him, Whereupon the Defendant prays and has leave to imparl till next Court and then to plead.

Ordered that the Court be adjourned to tomorrow morning 7 oClock.

JOHN CANON.

March 25th 1778 — The Court met Pursuant to adjournment.

Présent: John Campbell, William Crawford, Richard Yeates, John Decamp, John Stephenson, Joshua Wright, John McDowell, Zacheriah Connell, Gentlemen Justices.

Upon the motion of Thomas Hamilton in behalf of Robert Hamilton praying a new Tryal and farther hearing of the suit of Bazil Brown it is the Opinion of the Court that the Said Suit be reheard.

Bazil Brown

v

Then came the Plaintiff, and Thomas

Robert Hamilton Hamilton personally appeared in Court and under took for the said Defendant that in Case he shall be cast in this Suit he shall pay and satisfy the Condemnation of the Court and Costs of Suit or render his body to prison in

Execution for the same or that he the said Thos Hamilton would do it for him. Whereupon the said Defendant prays and has leave to imparl untill next Court and then to plead.

Ordered that a Dedimus do issue to take the Examination of Casper Sickler a witness in behalf of Bazil Brown against Robert Hamilton.

Present: Isaac Cox, Wm Goe Oliver Miller Mathew Ritchey Saml Newell Thos Freeman, Benjn Kerkendal, John Cannon, & George Valandingham, Gent Justices.

- (72) Ordered that John Stephenson and Isaac Cox be recommended as proper persons to serve as Colonels of the Militia, Joseph Beeler and George Valandingham as Lieutenant Colonels and William Harrison and Gabriel Cox as Majors of Militia.

William Christy came into Court being summoned as Garnishee in behalf of John Campbell and Joseph Simon against George Croghan; being sworn, saith that he hath two pair of Geers, one old ax, one old Spade, one pitch Fork one small box of Iron and an old Lanthorn, and no more of the Estate of said George in his hands.

John Stephenson & Isaac Cox produced Commissions from his Excellency the Governor appointing them Colonels of the Militia which being read the said John and Isaac came into Court and took the Oath of Colonels of Militia.

John Campbell, William Crawford Zachy Connell, John Cannon, John Stephenson, John Decamp, Gent. absent.

Gabriel Cox produced a Commission from his Excellency the Governor, for appointing him Major of Militia, which being read the said Gabriel came into Court and swore into said Commission

George Vallandingham produced a Commission from the Governor appointing him Lieut. Colonel of the Militia, which being read the said George Vallandingham came into Court & Swore to his Commission

Charles Reed came into Court and produced a Commission from his Excellency the Governor appointing him Lieutenant of Militia, which being read the said Charles came into Court and Swore to said Commission.

- (73) David Lefergee produced a Commission from his Excellency the Governor appointing him Ensign of the Militia Whereupon the said David came into Court and Swore to his Commission.

Edmund Baxter produced a Commission from his Excellency the Governor appointing him Captain of the Militia. Whereupon the said Edmund came into Court and swore into his Commission.

Samuel Smith produced a Commission from his Excellency the Governor, which being read the said Samuel came into Court and Swore into his Commission.

Upon the Petition of Samuel Cook, setting forth that he is desirous of building a Water Mill on Brushy Run, a Branch of Chirteers Creek¹ and praying for an Order for the Condemnation of one acre of Land on the opposite side of said Run to said Cooks Land: Ordered that the Sheriff summon a Jury of Twelve Free holders of the Vicinage, to meet on the Said Land petitioned for and they being first sworn shall diligently view the said Lands and Lands adjacent thereto on both sides of the Run together with the Timber and other conveniences thereon, with the true value of the Acre, and of the damages done to the party holding the same, and report the same to the next Court under their hands and seals

Ordered that a Dedimus issue to take the Examination of Hatton Wells in behalf of Zacheriah Connell against Samuel Wells.

Oliver Miller Gent returned ten Shillings received from Thomas Pritchard & Philip Dougherty for swearing two profane Oaths Ordered that the Sheriff receive the said Money and account with the Court at the laying of the levy.

Bargain and Sale, from John Harry to Robert Henderson for a tract of Land acknowledged by the said Harry and ordered to be recorded.

(74) John Greathouse is appointed Administrator of Daniel Greathouse deceased he complying with the Law, Whereupon the said John Came into Court with Thos Cook and Samuel Smith his Securities, entered into Bond and Oath accordingly.

Ordered that Nathaniel Tomblinson Benjamin Tomblinson, John Baxter and Edmund Baxter or any three of them appraise the Estate of Daniel Greathouse deceased and make report to next Court.

¹ Can this be the Brush Run emptying into Chartiers Creek within a mile below Canonsburg?

Enoch Springer is appointed Administrator of the Estate of Lemuel Davis, he complying with the Law. Whereupon the said Enoch with John Springer his Security came into Court and entered into Bond and Oath accordingly

Ordered that Benjamin Reno, Christopher Miller Thomas Redman & Samuel Rice or any three of them, they being first sworn to appraise the Estate of Lemuel Davis deceased, and make report to next Court.

William Christy is appointed Administrator of the Estate of Francis Brown deceased, he complying with the Law. Whereupon the said Christy came into Court with Samuel Evalt his Security and entered into bond and oath accordingly

Ordered that Jacob Bousman, Samuel Evalt, David Duncan and John Ormsby or any three of them being first sworn to appraise all the goods Chattles and Credits of Francis Brown deceased and make Return to next Court.

On motion of Charles Reed, Ordered that his Mark a Crop in the left Ear and a Crop and Slit in the right Ear be recorded.

On Motion of John Hall, Ordered that his Mark, a slit in the left Ear and a Crop in the right Ear be recorded

(75) Upon Motion of Thomas Applegate, Ordered that his Mark a Crop and hole in the near Ear be recorded.

Thomas Gist

v

Then came the Plff, and Isaac Pearce

Richard Waller personally appeared in Court and undertook for the defendant that in Case he shall be cast in this Suit he shall pay and Satisfy the Condemnation of the Court or render his body to prison in Execution for the Same, or that he the said Isaac Pearce would do it for him. Whereupon the Defendant prays and has leave to imparl untill next Court and then to plead.

The Commonwealth

v

Jacob Shilling (a criminal) being charged with a dissafection to the Common Wealth.

Then came the Defendant, who pleads, Not Guilty : Whereupon Came a Jury, to wit : Patrick McElroy, Bazil Brown,

Benjamin Vanatre, John Custard, James Ellison, Pierce Noland, William Marshall, Sen ; William Marshall Jun, John Munn, John Greathouse, Robert Henderson & John Morrison ; who say that the Prisoner is Not Guilty.

Inventory of the Estate of Jeremiah Wood, deceased, returned by the appraisers & ordered to be recorded.

Thomas Gist

v

Then came the Plaintiff, and Isaac Pearce

John Hall personally appeared in Court and undertook for the Defendant, that in Case he shall be cast in this Suit he shall satisfy and pay the Condemnation of the Court or render his body to prison in Execution for the same or that he the said Isaac Pearce would do it for him. Whereupon the Defendant prays and has leave to imparl untill next Court and then to plead.

(76) Charles Bilderback produced a Commission from his Excellency the Governor, appointing him Ensign of the Militia. Whereupon the said Charles came into Court and swore into said Commission.

Isaac Pearce produced a Commission from his Excellency the Governor appointing him Captain of the Militia. Whereupon the said Isaac Came into Court and Swore to said Commission

Josiah Springer produced a Commission from his Excellency the Governor appointing him Captain of the Militia. Whereupon the said Josiah came into Court and swore to said Commission.

George Redman produced a Commission from his Excellency the Governor, appointing him Lieutenant of Militia. Whereupon the Sd George came into Court and swore to said Commission.

Elijah Pearce produced a Commission from his Excellency the Governor, appointing him Lieutenant of Militia. Whereupon the said Elijah came into Court and Swore to said Commission.

Richard Waller produced a Commission from his Excellency the Governor, appointing him Lieutenant of Militia. Whereupon the said Richard came into Court and Swore to said Commission.

Ordered that a Bill of Indictment be preferred to the Grand Jury against John Nelson, for assalting John Johnston Constable in the Execution of his Office.

Ordered that a Bill of Indictment be preferred to the Grand Jury against Henry Newkirk Isaac Newkirk ——— Carter, John Williams John Hull Thomas Reed and Henry Hull, for refusing to assist the Constable in the Execution of his Office when assaulted in the same.

Bill of Sale. James Vanatre to Henry Morrison, proved by the Oaths of John Munn & John Morrison the two Subscribing witnesses and Ordered to be recorded.

(77)

Robert McKey

v

Moses Davison Case Ordered to be dismissed at the Plaintiffs Request.

Upon the motion of Thomas Cook, Ordered That he have leave to keep a Ordinary at his dwelling House the ensuing year, he complying with the Law.

On motion of Jacob Bousman Ordered that he have leave to keep an Ordinary at his Dwelling house, opposite the town of Pittsburgh, for the ensuing year, he complying with the Law.

Upon the motion of John Munn ordered that he have leave to keep an Ordinary at his Dwelling house, the ensuing year, he complying with the Law.

Jacob Shilling came into Court & Swore the peace against John Nelson, who is ordered to give Security for his peaceable deportment and good demeanor for one year, next ensuing, the said John Nelson held in fifty pounds, and Chrisley Crawbill his Security in fifty pounds.

Upon motion of William Christy Ordered that he have leave to keep an Ordinary at his Dwelling house in the town of Pittsburgh, the ensuing year, he complying with the Law.

Upon the motion of Josiah Snowden, Ordered that his mark a Crop and Slit in the left Ear and an Under an uper Slit in the right ear be recorded.

Ordered that Jonathan Rogers, Thomas Wilson, David Phillips William Nemons, George Gillespie John White Junr, Benjamin Wells, Moses Bradley, Nicholas Harrison, Jonathan

Philips, Basil Weeks, John Hull and Benjamin Vanatre be appointed Constables the ensuing year and that they be summoned to next Court to qualify into said Office.

- (78) William Bruce and Thomas Pollock produced Commissions from his Excellency the Governor which being read the said William and Thomas came into Court and swore to said Commissions.

Ordered that the Court be adjourned to tomorrow at 7 oClock.

JOHN CANON.

March 26th 1778, the Court met according to adjournment.

Present: John Cannon, Richard Yeates, Joshua Wright, Samuel Newell, William Crawford, Gentlemen Justices.

Upon the Petition of John Johnston; Ordered that Gabriel Cox, James Wright, Nathaniel Blackmore, and Paul Froman, or any three of them, they being first sworn view a road the nearest and the best way from the Court house to Pentecost's Mills¹ on Chirteers Creek and make Return to Next Court.

Benjamin Jones v Patrick McDonald, Assault. P. C.

Paulser Shilling v Spencer Collins, Trespass P. C.

Dorsey Pentecost

v

Christopher McDonald The Defendant being arrested and failing to appear, tho' Solemnly called, On motion of the Plaintiff It is ordered that unless the Defendant shall appear at the next Court and answer the plaintiffs Action that Judgment shall be then given against the said Defendant and his Appearance Bail for the Damages in the Declaration mentioned & Costs

- (79) Zachariah Connell v Abraham Vaughan Debt P. C.
 David Wilson v Henry Bowling Debt P. C.
 John Spivy v Samuel Beeler. Trespass P. C.
 John Gallaher & wife v Christian Stumitt Slander P. C.
 Joseph Lindsey v George Lang Debt P. C.
 Richard Swipicks v Jacob Jones. Case P. C.
 Paul Froman v Robert McCrowdy Debt P. C.
 Frances Morrison v Daniel Swigart Debt P. C.
 Henry Martin v Samuel Patterson Debt — Agreed.

¹ Now, or late Beck's Mills, or Linden, North Strabane tp.

John Lawrence

v

Thomas Rogers The Defendant being arrested and failing to appear tho Solemnly Called, On Motion of the Plaintiff It is Ordered that unless the Defendant shall appear at the next Court and answer the Plaintiffs Action that Judgment shall then be given against the said Defendant his appearance Bail for the Damages in the Declaration mentioned and Costs.

George Sekley v John Ramage Case, P. C.

Susannah Sekley v Robert McKindley Case, P. C.

Eli Williams v Philip Tabor Debt Agreed

Thomas Freeman v Jno James & Saml Lynch Case, P. C.

Jacob Bousman v John Bradley Case. P. C.

John Johnston —	} Case P C
Mary Burris v Michael Humble —	
Abraham Jones —	

James Johnston v Godfrey Wagoner Case P. C.

Jacob Shilling v Henry Newkirk Case A. C.

Same v Same Debt A: C:

James Dunaghagan v James Gray Case A: C:

Paul Froman v John Dean Case A: C

Thomas Cook v Richard Dickerson Case A: C

William Thompson v John Fife Senr Assault A: C

James Miller v Jacob Peatt Case Agreed.

Francis Reno produced a Commission from his Excellency the Governor appointing him Lieutenant of the Militia which being read the said Francis Came into Court and swore into said Commission

(80) Maybary Evans produced a Commission from his Excellency the Governor appointing him Captain of the Militia which being read, the said Maybury came into Court and Swore to his Commission

George Waddle produced a Commission from his Excellency the Governor, appointing him Ensign of the Militia which being read the said George came into Court and Swore to his Commission.

Joseph Vance and David Cox produced Commissions from his Excellency the Governor appointing them Lieutenants in

the Militia which being read the said Joseph and David came into Court and Swore to said Commissions.

Ordered, that the Wife of Robert Crawford a poor Soldier now in the Continental service, be allowed the sum of four pounds per month for the support of herself and three Children ; and that this Court do draw on the Treasurer of this Common Wealth for the same.

Ordered, that Sarah Stewart, the wife of ——— Stewart, a poor soldier in the Continental service, be allowed the sum of three pounds per month, for the support of herself and two Children, to commence the 25th day of January last, and that this Court do draw on the Treasurer of this Common Wealth for the same.

Ordered that Colo John Campbell pay unto Richard Yeates Gent. the money now in his hands allowed to Mrs Nox for her and Childrens Support by a former Order of this Court and this Court and the said Mr. Yeates is requested to deliver the said money to said Mrs Nox.

(81) Ordered that Colo John Campbell pay to Benjamin Fry Gentleman the money now in his hand allowed the wives of William and Abraham Ritchey for their and Children's Support by a former Order of this Court and the said Fry is requested to pay said money to said women.

Joshua Wright, Gent, absent.

John Campbell produced an Indenture from John Milligan and Martha Milligan, binding Wm Milligan to Robert Campbell untill he arrives to the age of Twenty one years and prays the Consent of the Court to said Indenture which is accordingly consented to.

Ordered that John Minter, Maybery Evans, Nathan Ellis, Edward Kemp, Josiah Record, and James Scott be recommended to his Excellency as proper persons to serve as Captains of Militia and John Mason, James Hopkins Samuel Newell, John Chamberline Willm McCarmick Richard Crooks Nathl Blackmore Francis Reno, Robert Henderson, Thomas Lapsley, Willm Everard George Long Thomas Reed John White Junr & James Wherry as Lieutenants of Militia and Robert Newell, Michael Tygert Lewis Reno, George Wadale George Christ, Isaac McMichael William Murley, Edmund Riggs Samuel Johnston & Samuel Alexander as Ensigns of Militia.

Josiah Records produced a Commission from his Excellency the Governor appointing him Captain of the Militia which was read and sworn to accordingly.

- (82) George Long produced a Commission from his Excellency the Governor appointing him Lieutenant of Militia which was read and sworn to accordingly.

Samuel Newell produced a Commission from his Excellency the Governor appointing him Lieutenant of Militia which was read and sworn to accordingly.

Upon the Motion of Zadock Wright Ordered that his Mark an under bit in the right ear and crop and slit in the left ear be recorded.

Ordered that the Effects of George Croghan in the hands of David Duncan and William Christy by them returned as Garnishees at the Suit of John Campbell and Joseph Simon against said Croghan be secured by the Sheriff for further proceedings thereof, and that an attachment issue against George Lightenberger who was summoned Garnishee in behalf of the Plaintiffs in said Suit and failed to appear to declare how much and what of the Estate of the said George was in his hands.

Ordered that the Court be adjourned to the Court in Course.

W. CRAWFORD.

(To be continued.)

ANNALS

OF THE

CARNEGIE MUSEUM

VOLUME II. NO. 2.

EDITORIAL.

THE work of the various members of the Staff of the Museum during the spring and early summer has yielded important and substantial results in the way of permanent accessions to the various collections.

THE expedition to Costa Rica under the care of Mr. C. V. Hartman has resulted in the acquisition of a large amount of very valuable archæological material from that country. Among the things acquired is the splendid collection of objects of jade and jadeite formed by Señor Don Jose Maria Velasco, which for a number of years has been on deposit in the Museum of Archæology of the University of Pennsylvania. In addition to this collection Mr. Hartman has succeeded in purchasing several others of scarcely less importance, and has made a number of excavations at points of interest, resulting in the recovery of a great quantity of prehistoric material, which will tend to supplement the display of material obtained by the direct expenditure of money in the way which has been mentioned.

MR. CARNEGIE with signal generosity has authorized the purchase of the great collection of European fossils in the possession of the Baron de Bayet, of Brussels. This is one of the largest and most important collections of its kind in Europe, and its transfer to the Car-

negie Museum will tend to make the institution a focal point for paleontologists who wish to familiarize themselves with the results of the labors of European students in their favorite field of research. The Director of the Museum is making arrangements to have the entire collection brought over from Belgium to Pittsburgh in the near future.

THE expedition to Florida in quest of ornithological material under the care of Mr. Todd resulted in the acquisition of over thirteen hundred specimens, representing a great deal of desirable material.

MR. J. A. SHAFER, who accompanied Dr. N. L. Britton, of the New York Botanical Garden, to Cuba, returned in the latter part of May, having remained somewhat longer on the island than did the leader of the expedition. The result of the joint labors of the two collectors has been the addition to the herbarium at Bronx Park and at the Carnegie Museum of about a thousand species of plants in good condition.

THE fourth Memoir of the series now in process of publication by the Museum, before these lines are printed will have come from the press and been distributed. It is a masterly paper by Dr. William Harris Ashmead, of the United States National Museum, based upon the collection of South American *Chalcidoidea* made by Mr. Herbert H. Smith, and belonging to the Carnegie Museum. Dr. Ashmead is recognized as being one of the very foremost students of the hymenoptera now living. We hope to be able shortly to publish still other papers from his pen. He has now in hand other portions of the great collections belonging to the Carnegie Museum, and has promised to report upon them.

Dr. Ashmead comes very honestly by his taste for scientific and literary labor. He is descended from a long line of intellectual and distinguished men. His mother was the daughter of Thomas Graham, a lineal descendant of James Fitz-James Graham, the Earl of Montrose, or "Claverhouse," whose name is famous in Scottish story. His grandfather, Thomas Graham, was one of the founders of the public school system in the city of Philadelphia. Another ancestor, John Kittera, was Chief Justice of Pennsylvania during the Revolutionary

War. Through his paternal grandmother he is descended from Dr. George Lehman, who was staff surgeon with General George Washington at Valley Forge, Staten Island, Perth Amboy and elsewhere. He is also descended from General von Lasher, who was one of the German officers who rendered distinguished services during the American Revolution to the cause of the colonists. His cousin, Mr. William Ashmead Bartlett, of London, has figured prominently in university and political circles in England.

THE reproduction of the skeleton of *Diplodocus carnegii* which Mr. Carnegie has authorized for the purpose of presenting the same to the British Museum, is going on as rapidly as can be expected. The work is one of great difficulty, and requires vast care and patience, so that all the characteristic features of each bone may be represented accurately.

THE paleontologists in the field report themselves as being very successful. Mr. C. W. Gilmore having completed his labors in the Freeze-out Mountains of Wyoming, has repaired to western Kansas, where he will work during the remainder of the summer in the chalk. Mr. Earl Douglass is hard at work in Montana. Mr. Hatcher has at latest advices returned from a geological reconnoissance on the southern borders of the British territory adjoining Montana, and thence went into the region of the Judith River. He reports the party as well and prospering, but finding the weather disagreeable and inclement. While Pittsburgh has been sweltering under torrid skies our explorers have been rained and snowed upon daily.

MR. O. A. PETERSON is at work upon a monograph of the fossils of camels, which he has recently discovered, and one of the skeletons of which will this summer be set up in the laboratory. The material obtained last summer in Nebraska is very fine, and will serve well to illustrate some of the rarer and little known species of extinct Cam-elidæ.

PROFESSOR CHARLES R. EASTMAN, of Harvard University, will write up and describe the fossil fishes contained in the collection which has just been secured by Mr. Carnegie from the Baron de Bayet.

PROFESSOR A. E. ORTMANN has assumed his position as Curator of Invertebrate Zoölogy at the Carnegie Museum. He reported for duty on the first day of July. He is at present engaged in making an inventory of the collections contained in the Museum belonging to his section of labor.

MR. D. R. SUMSTINE continues this summer the work he began last year for the Museum in collecting the fungi of western Pennsylvania. He reports the discovery of several species hitherto new to science and undescribed.

MR. HENRY KLAGES, of Jeannette, Pennsylvania, is temporarily engaged as an assistant in the section of entomology. He is working upon the South American coleoptera, a great many boxes of which required to be mounted for study.

MR. W. NORMAN MILLER during the summer vacation is assisting Mr. J. A. Shafer in poisoning and mounting the specimens recently secured for the herbarium. Mr. Miller is a student at the University of Pennsylvania.

V. NEW VERTEBRATES FROM THE MONTANA TERTIARY.

BY EARL DOUGLASS.

During the summer of 1902 explorations were continued by the writer in western Montana for the Carnegie Museum. Collections of rock samples, and of fossil plants, invertebrates, and vertebrates were obtained from the Oligocene and Miocene formations. Special effort was made to discover the conditions under which the various deposits were formed. While it will require much work and careful study to interpret the history of Tertiary times in this region, it is nevertheless important to record such data as tend to elucidate the problem. In this preliminary sketch the writer wishes to give only a few of the leading facts, leaving a more thorough discussion of the matter to a time when more extended explorations have been completed and a careful study of the material already collected has been made.

The fossil mammals found during the past summer have not yet been studied. Those described in the present paper were collected by the writer in previous years extending back as far as 1895.

EOCENE?

SAGE CREEK BEDS.

This formation occurs on Sage Creek about seven miles northeast of Lima in Beaverhead County. Only four specimens were found that are of any value in determining the age of the formation. One of these (*Heptodon*?) is undoubtedly Eocene. Two specimens that I have referred to *Hyrachyus* were found, but one consists of a solitary tooth; and the other—a mandible, atlas, and part of a skull—looks like a more modern form than we would expect to find associated with *Heptodon*. The last specimen—a part of a mandible—has all the peculiar characters of the corresponding portion of *Metamynodon*? but is very much smaller than the White River species. However, the *Hyrachyus* skull was found a few feet under the specimen of *Heptodon*, and the *Metamynodon* jaw a few feet under the stratum that contained the solitary tooth which resembles *Hyrachyus*.

Fossils were found in only a restricted locality. The hill where *Heptodon*? and the jaws of *Hyrachyus*? were found is composed of stratified material, and it contains quartz geodes, tubes lined with crystals both of calcite and quartz, and calcified trunks and twigs of trees.

It is hoped that these beds will soon be more fully and carefully explored.

LIST OF SPECIES.

Heptodon?

Hyrachyus priscus Douglass.

Hyrachyus?

Metamynodon?

OLIGOCENE.

THE WHITE RIVER FORMATION.

That a great part of the White River deposits of Montana was formed in water is evident. It does not appear that the water was, as a rule, very deep. There are undoubtedly not only lake, but marsh and river deposits. The evidence points to some slow acting obstruction of the water, rather than to a more sudden appearance of high barriers making deep lakes which were in course of time gradually drained by the cutting of a channel through the barriers. The conditions could be better explained by supposing that there was slow and inconstant upheavals or oscillations across the path of drainage. When the rate of elevation of the barrier was greater than the rate of deepening of the channel through it, there would be ponding of the water. The excess of erosion would, if it operated long enough, lower the water level, thus making dry and marshland where water had been before. So in the long time in which there was an unequal rate of raising of the barrier the conditions would be very complex. The relation between the rate of elevation of the barrier, sedimentation, and erosion of the channel were such that the water of the lakes was not usually of great depth. There are undoubtedly not only lake, but nearly all kinds of fresh water deposits as we should expect under such conditions.

This is only a hypothesis which remains to be proven or disproven, but which at the present time seems to the writer to best accord with the data at hand.

We find nearly everywhere evidences of shallow water, such as ripple marks, bird tracks, plant remains, shallow water mollusca, etc.

There is much volcanic dust in the beds, some strata being made up almost entirely of this material. Of course these beds of pure dust must have been transported from their source by the winds.

The arguments used by Matthew to prove that the White River of the plains is not of lacustrine origin do not apply here.

1. The deposits, especially the finer ones, are commonly distinctly stratified, often thinly laminated, and sometimes splitting into papery shales. Distinctly stratified beds can often be traced for a considerable distance and sometimes they are beautifully ripple-marked.

2. The fauna is not strictly a terrestrial one. Abundance of fresh water diatoms, mollusca, and fish are found.

3. The mammalian remains are usually fragmentary, and occur near hills and mountains of older rocks, which evidently formed the shore of the lakes, or border of the marshes, if such existed.

4. There is no difficulty in conceiving the obstruction of the waters by orographic movements or by lava flows. For example, the Missouri River from the region of Helena northward to Cascade—a distance of about fifty miles—flows through a cañon in the mountain uplift, which here crosses its course. For the first twenty-five miles there are successions of narrow cañons and broader semi-circular areas. In the latter are remains of Tertiary deposits, showing that these valleys were carved out during or previous to Tertiary times. But from near the place where Wolf Creek enters the Missouri there is a change, and the river, instead of cutting its way through Palæozoic strata, has carved a uniformly narrow cañon through eruptive rock. Above this long cañon we can trace the Tertiary deposits, occupying present and old river valleys up the Missouri and Jefferson rivers without obstruction of the older rocks to the continental divide and boundary line between Montana and Idaho, near the village of Monida. In fact the old river valley undoubtedly passes through the divide into Idaho.

The occurrence of this great mass of eruptive rock, were it a surface flow, would seem to offer a ready explanation of the occurrence of the fresh water sediments above. But much of the rock is quite coarsely crystalline, as if cooled at a considerable depth.

It is true that in no place on the mountain sides has the writer

¹ The coarser material is evidently either of delta or stream origin. The writer at present sees no reason for believing that any great extent of the deposits is purely æolian.

found what one could be sure were old lake terraces. But this does not appear to be any evidence of the absence of lakes, for in a region of comparatively rapid erosion, we could hardly expect them to endure so long.

Fossil plants were collected in several places in the White River during the last summer. In one locality in the Lower Madison Valley *tracks of birds* were found on the sandstone. Just above were beds of pure volcanic ash beautifully ripple-marked.

The lower division of the White River — the Titanotherium Beds — east of Winston and southeast of Helena, attain a considerable thickness. One measurement gave 4500 feet, another farther south 4900 feet. Where this latter measurement was made a fault occurs, the exact displacement of which was not ascertained and it is possible that this might bring this measurement a little nearer to the former one. The beds vary from nearly horizontal to a dip of 53° . These measurements do not include the whole thickness of the White River here. The Missouri Valley makes a gap of a couple of miles and when seen again across the river the strata are nearly horizontal and have changed in character. About 150 feet of strata are exposed here. Adding this to the 4900 feet we have here a measurable thickness of 5050. How much is lost by the erosion of the river valley it is not possible to tell. The upper beds here are like the lower ones exposed on the Madison River. Above the latter, on the Madison, I measured 300 feet of mostly fine, stratified deposit.

There is a possibility that the lowermost of these beds may extend down into the Eocene, though there is at present no evidence of this.

At some time, either previous to or succeeding the White River epoch, the rivers of western Montana underwent much change, for in many places they leave the older valleys which were filled, or partly filled, with Tertiary deposits and flow through deep narrow cañons in the Archæan and Palæozoic rocks. About ten miles below Whitehall the Jefferson flows eastward through a long cañon, while both north and south are old valleys containing only Tertiary or later deposits. In many places the streams have left what seems to be their easy, natural course and made their difficult way through old granite, limestone, and quartzite rocks.

The beds in the vicinity of Helena contain much sand and coarser material, waterworn gravel brought from a distance, and unworn angular fragments from the adjacent Algonkian slates and quartzites.

In the lower Madison Valley, where the upper beds are so well exposed, the material is mostly fine.¹

Northeastward from Whitehall the rock of the Titanotherium beds has been much disturbed and metamorphosed, the light colored clay and sand being in great part changed into red and black slate and quartzite. In one place the strata are nearly vertical. In some places there are mineral veins and the rock has a granitic structure.

There is doubt that the mountains were as high during the White River epoch as at the present time.

Besides the places where fossils had been previously found, they were discovered last summer at Cañon Ferry, in the Prickly Pear valley, northeast of Whitehall, and on the divide between the Missouri and North Boulder valleys.

The beds in Montana appear in the main to represent the Titanotherium and Oreodon Beds of South Dakota.

LIST OF FOSSILS.

Fossil Plants.

Fish.

Helodermoides tuberculatus Douglass.

Ictops acutidens Douglass.

Gymnoptychus minor (Douglass).

Cylindrodon fontis Douglass.

Sciurus jeffersoni Douglass.

Ischyromys typus Leidy.

Palæolagus temnodon Douglass.

Palæolagus brachyodon Matthew.

Hyænodon minutus Douglass.

Hyænodon montanus Douglass.²

Limnenetes platyceps Douglass.

Limnenetes ? anceps Douglass.

Trigenicus socialis Douglass.

Oreodon macrorhinus Douglass.

Eucrotapus helenæ Douglass.

Agriochærus minimus Douglass.

¹ The exact horizon of these upper beds is uncertain, as no good mammals have been found, but they lie unconformably under the Loup Fork. I have always considered them as White River.

² Matthew thinks this is probably *Pseudopterodon*. *Bull. Am. Mus. Nat. Hist.*, May 19, 1903.

Agriochærus maximus Douglass.

Colodon cingulatus Douglass.

Mesohippus bairdi Leidy.

Mesohippus latidens Douglass.

Hyracodon.

Titanotherium.

THE FORT LOGAN BEDS.

The so-called Deep River Beds and their interesting mammalian fauna are well known through the labors of Cope and Scott. There is, however, much unavoidable confusion continually arising from the use of one name for two distinct horizons. The name "Deep River" is used without the adjectives "upper" or "lower" and one does not always know what is meant. Whether or not, as Scott thinks probable, one is John Day (Upper Oligocene) and the other Loup Fork, it is certain that they have different assemblages of fossils, and that each should have a name by which it may be clearly distinguished. The river in whose valley the Deep River beds occur is now universally known as Smith River, and this is probably the true name; though as early as 1876 Grinnell and Dana called this stream "Deep Creek."

However this may be, I do not think that this should invalidate the name so long as the type locality is beyond doubt. The beds are in the valley of what is now known as Smith River, between the town of White Sulphur Springs and old Fort Logan and between the Little Belt Mountains on the east and the Big Belt Mountains on the west.¹

Scott² first gave the name "Deep River beds" as a substitute for Cope's "Ticholeptus beds." Scott says in his "Mammalia of the Deep River Beds" (p. 59): "The upper beds which Grinnell and Dana called Pliocene present a very different assemblage of species. Cope's collection, so far as I can judge, was gathered entirely from these beds and contains nothing from the lower horizon." It seems to the writer, then, that the name Deep River should be applied to the upper beds alone.

For the older formation, Upper Oligocene (John Day?), I propose the name Fort Logan beds, from the old military post a short distance from the best outcrops. I do not know that this horizon is exactly paralleled by any other.

¹ Rep. of Reconnaissance from Carroll, Montana, to the Yellowstone National Park, made by Capt. Ludlow in 1875; Washington, 1876, p. 115.

² Princeton Scientific Expedition of 1891. Prin. Col. Bull., III., p. 88.

The following list of fossils from this horizon is taken from Scott's Mammalia of the Deep River Beds, p. 58.

Cynodesmus thooides Scott.

Stenocfiber montanus Scott.

Cænopus.

Miohippus annectens ? Marsh.

M. anceps ? Marsh.

M. (Anchiterium) equiceps ? Cope.

Mesoreodon chelonyx Scott.

M. intermedius Scott.

Pæbrotherium sp.

Hypertragulus calcaratus Cope.

BEDS DOUBTFULLY OLIGOCENE.

Besides the beds which I have called Fort Logan and which Scott suspects are John Day, the writer has, in previous years, found localities where the few fossils that were found and also the lithological character of the beds seem to indicate a formation intermediate between the White River and Loup Fork. One locality in which the best material was found is about three miles east of the town of Drummond on the Hellgate River. Only three good specimens were obtained here and none of these can I identify with species found elsewhere.

The strata are light colored, resembling the White River in some respects, yet more like part of the Loup Fork in not being distinctly stratified.

LIST OF FOSSILS.

Mesocyon ? *drummondensis* Douglass.

Leptomeryx transmontanus Douglass.

Promerycochærus minor Douglass.

MIOCENE.

THE LOUP FORK FORMATION.

In the valleys of western Montana there are at least three phases of the Loup Fork—that is, there are beds with three different assemblages of fossils. How much of this is due to actual difference of time and how much to different conditions of preservation is difficult to determine. The valuable suggestions, which Dr. W. D. Matthew¹

¹ "Fossil Mammals from Colorado," and "Is the White River an Aeolian Deposit?"

has made concerning the habitat of extinct mammals are worthy of the most careful thought and study.

In this same region to-day there are animals that live high among the rocks of the mountain peaks. These we would expect to be extremely rare in lacustrine or fluviatile deposits. Others, like some species of deer, live principally in the wooded mountains and drink from mountain streams. These under present conditions would seldom be preserved, yet, when lakes and marshes were more extensive, and when the valleys were not cultivated, the chances would be greater.

It is interesting to notice the difference in habits of domestic horses and cattle, when left to themselves. Domestication has not entirely changed their natures. In this mountainous region horses will come down to the streams from the dry hills to drink once in one, two, or three days according to the weather. They come in bands, usually in the afternoons of hot summer days, drink their fill, and go far back to the hills, perhaps miles from their watering places. Cattle remain nearer to water as they are not so "well built for speed," come down to streams and ponds to drink, and linger in or near the water during the heat of the day. They often die near these watering places. In swamps they get mired, and not having the strength to extricate themselves, leave their bones in a favorable place for preservation. It is easy to see which of these animals, cattle or horses, under present conditions would stand the better chance of being preserved in aqueous deposits; though any animal going to a watering place during its last sickness is very apt to leave its bones near by.

Last summer the party in charge of the writer found a place in the Deep River beds, where skulls and portions of skeletons were abundant; but with the exception of turtles and some mammalian fragments, they all belonged to the *Oreodontidae*. In one locality on the North Boulder only turtles, camels, and horses were found. The latter probably represents a little later phase of the Loup Fork, yet no one would claim that in either case the fossils were a just representation of the fauna of the times. It is possible that these Oreodonts found in marshes, where other mammals seldom came, their most natural feeding ground.

THE DEEP RIVER BEDS.

For a description of these beds in their typical locality near White Sulphur Springs I would refer to Scott's valuable paper, *The Mam-*

malia of the Deep River Beds. During the last summer this formation was identified at Cañon Ferry on the Missouri River about twenty miles east of Helena. Here many skulls of *Promerycochærus*, *Cyclopidius*, *Merychys* and other *Oreodonts* were obtained.

What are evidently the same beds were found on the North Boulder opposite Cold Spring Postoffice. The fragments of fossils seen appeared to be the same as those obtained at Cañon Ferry; but they were found during a reconnaissance on horseback and not collected by the writer. The character of the beds is nearly identical.

THE FLINT CREEK BEDS.

These have not been visited by the writer since 1899.¹ Several fossil mammals were found; but, with one or two exceptions, they cannot be identified with species found in other places. These exceptions are portions of four skulls of (*a*) *Palæomeryx*, one of which is nearly complete with one side of the mandible. There may be two species, but one is undoubtedly *Palæomeryx borealis* (Cope). (*b*) *Mylogaulus paniensis* is identified by the premolar tooth only, which does not differ from that of the type. The following is a list of the species:

Ogmophis arenarum Douglass.

Talpa ? platybrachys Douglass.

Sciurus.

Mylogaulus paniensis Matthew.

Ælurodon ? brachygnathus Douglass.

Protohippus ?

Hesperhys vagrans Douglass.

Merychys smithi Douglass.

Poatrephes paludicola Douglass.

Merycochærus laticeps Douglass.

Procamelus.

*Palæomeryx borealis*² (Cope).

These were all found near the village of New Chicago in Granite County.

The typical exposure forms a line of bluffs 100 to 150 or more feet

¹ See *Am. Journ. Sc.*, Vol. 10, Dec., 1900, p. 428.

² There is some doubt that this is *Palæomeryx*, but I see no conclusive evidence that it is not; so, until the matter can be settled, it is best to include the American specimens with the European genus.

in height on the west side of the valley of Flint Creek, beginning about one mile north of the village of New Chicago and extending southward several miles. The fossils were obtained within two or three miles of the village.

THE MADISON VALLEY BEDS.

The Loup Fork beds of the Lower Madison Valley are, in *great part*, at least, of stream valley origin. By this I mean such deposits as usually accumulate in valleys of rivers and smaller streams, including channel deposits, mud flats, sand bars, flood plains, ponds, and small lakes.

The material is principally sand, sandy clay, and gravel, partly without extensive uniformity of stratification. Yet in part the beds are well stratified. This is especially true of those of pure volcanic ash, and it seems almost certain that at times during the Loup Fork there were quite extensive marshes, or lakes.

During last season these beds were identified in the Missouri Valley east of Winston by mammalian fossils. The remains of camels (*Procamelus*) and horses (*Protohippus*) were found on the north Boulder Creek in beds that undoubtedly belong to this division of the Loup Fork.

An abundance of fossil leaves was found both in the Lower Madison Valley and east of Winston.

PARTIAL LIST OF SPECIES.

- Sciurus arctomyoides* Douglass.
- Palæarctomys montanus* Douglass.
- Palæarctomys macrorhinus* Douglass.
- Mylagaulus ? pristinus* Douglass.
- Mylagaulus ? proximus* Douglass.
- Mustela minor* Douglass.
- Ælurodon* sp.
- Dinocyon ossifragus* Douglass.
- Aphelops ceratorhinus* Douglass.
- Protohippus*.
- Hippotherium isonesum* Cope.
- Merycochærus altiramus* Douglass.
- Merycochærus madisonius* Douglass.
- Gomphotherium (Protomeryx ?) serus* Douglass.
- Protolabis montanus* Douglass.
- Procamelus madisonius* Douglass.
- Procamelus lacustris* Douglass.
- Blastomeryx gemmifer* Cope.

Merycodus necatus Leidy.

Merycodus ? *agilis* (Douglass).

Palæomeryx americanus Douglass.

Palæomeryx borealis (Cope).

Mastodon.

These beds overlie the White River and occupy the top of the triangular bench between the Madison and Gallatin rivers from the vicinity of Logan on the north, nearly to Elk Creek on the south ; also the tops of the high bench west of the Madison River.

DESCRIPTIONS OF NEW GENERA AND SPECIES.

All the fossils described in this paper were collected by the writer, unless otherwise stated. The drawings were made by Mr. S. Prentice. The numbers given to the specimens are the Carnegie Museum numbers.

EOCENE ? (SAGE CREEK BEDS.)

PERISSODACTYLA.

HEPTODON ?

No. 717. Fig. 1.

Part of a superior maxillary with the last premolar and the three molars on the left side. From the Sage Creek beds northeast of Lima.

It is doubtful whether this should be assigned to the genus *Heptodon* or to *Systemodon*. Taking Dr. Wortman's distinguishing characters of the teeth it is intermediate between the two. A comparison with the specimens in the American Museum of Natural History confirms this, but it seems to be nearer to *Heptodon* than to *Systemodon*, appearing to be some more primitive form of that genus.

The cross crests are low. The posterior outer cusp in M^3 is flat and pushed far inward, making the meta-
loph very short, and the tooth nearly an equilateral triangle in outline as seen from above. In M^2 the posterior outer cone is a trifle convex outwardly, though it is slightly concave near the posterior edge. In

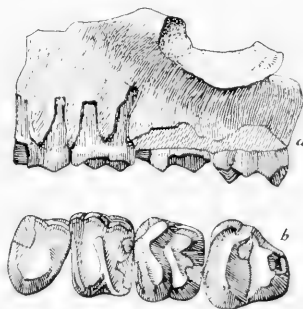


FIG. 1. *Heptodon* ? (717), Sage Creek Beds. Natural size. *a*. Part of left maxillary with last premolar and three molars. *b*. Crown view of teeth of same.

M¹ this element of the tooth is decidedly convex and nearly on an antero-posterior line with the anterior outer cone. P¹ had but one cross-crest. The tooth stands obliquely, the inner portion being farther forward.

MEASUREMENTS.

	Mm.
Height of the lower border of orbit above alveolar border at M ² ..	18
Length of P ¹	7.5
Width " ".....	10.5
Length of M ¹	8.5
Width " ".....	10.5
Length of M ²	10
Length of M ³	11
Width.....	12
Height of crown of M ³	3.3

From Sage Creek about seven miles northeast of Lima.

HYRACHYUS ? PRISCUS sp. nov.

No. 784. Fig. 2.

The type includes the greater part of the mandible with all the post-canines except P_T, the anterior part of the skull with incisors and premolars, and the atlas. It was found a few feet below the specimen of *Heptodon* ? just described.

The premaxillaries are rather slender and entirely separated. The diastema between the canine and the first premolar moderately long; P¹ small; premolars increasing rapidly in size posteriorly; P² beginning to assume the molar pattern — that is, the inner lobe is beginning to divide, though no such tendency appears in P³ and P⁴; mandible heavy and thick; symphyseal part proportionately slender; masseteric fossa high; angle broad; lower border convex antero-posteriorly.

The premaxillaries resemble those of the modern tapir (*Elasmognathus*) in form, but they are not coössified anteriorly and are not nearly so robust. Near the anterior inner part of the right premaxillary there was a small, peg-like process projecting backward and toward the other premaxillary, but no sign of a union of the two premaxillaries. The diastema between the canine and P¹ was proportionally as long as in *Elasmognathus*. The infraorbital foramen opens above P³.

The specimen was in a breccia formed by the breaking up and recementing of the sandstone so parts of the broken skull were separated. Fragments of the upper part of the skull, including por-

tions of the nasals, were put together and it appears that the nasals were reduced and shortened, in this respect being intermediate between *Hyrachyus* and *Protapirus*. The anterior upper portion of the skull is broadly and evenly convex.

The longitudinal portion of the mandible is robust, but it contracts just in front of the anterior premolar, making the symphyseal region small. The ascending portion is broad. The angle extends a little below the posterior lower border of the horizontal ramus. The last mo-

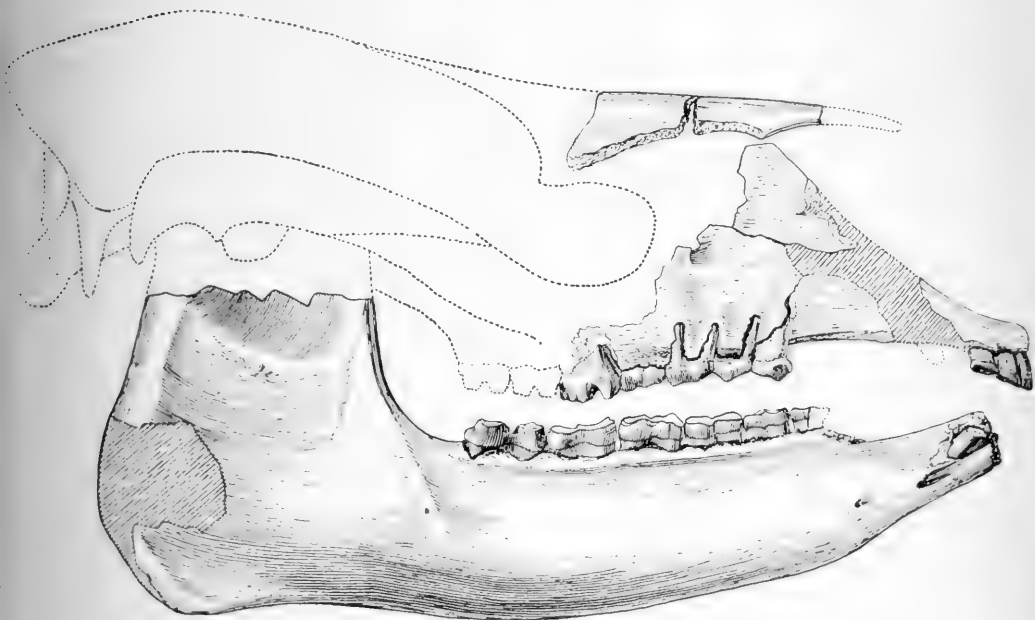


FIG. 2. *Hyrachyus priscus*. No. 784. Sage Creek Beds. One half natural size.

lar is considerably in advance of the ascending ramus. The masseteric fossa extends nearly down to the level of the molars.

The animal was old and not all of the structure of the teeth can be made out on account of their worn condition. The worn surfaces of the upper incisors are oblong-oval or elliptical. They stand in a nearly vertical position as in the tapir. They are all nearly of the same size. The premolars are very much like those of *H. agrarius*. P^1 is small. P^2 is the only one which appears to have a tendency to

assume the molar pattern. There are internal cingula on the last two premolars. The lower teeth are much like those of *H. agrarius*.

The atlas is much like that of *Protapirus validus*. The concavity for the odontoid process of the axis is much narrower, indicating a thick, conical odontoid. The posterior cotyles are wider dorso-ventrally, the lower part is longer antero-posteriorly on the median line, and there is quite a large protuberance on the ventral posterior border, projecting backward.

MEASUREMENTS.

	Mm.
Width of palate between second premolars.....	38
Length of I ²	8
Width of I ²	5
Length of premolar series.....	46.5
Length of P ¹	10
Width of P ¹	7
Length of P ²	9.7
Width of P ²	12
Length of P ³	13
Width of P ³	18.6
Length of P ⁴	19.5
Width of P ⁴	22
Length of mandible about.....	250
Width " at symphysis, narrowest.....	26
Depth " under P ¹	38
Depth " under M ³	47
Length of inferior molar-premolar series.....	98

From same locality as the preceding.

HYRACHYUS.

No. 718. Fig. 3.



FIG. 3. *Hyrachyus?* No. 718. Crown view of last left upper molar. Sage Creek beds. $\frac{1}{2}$ nat. size.

Represented by a solitary last upper molar found about a half mile from *Heptodon* (No. 717) and *Hyrachyus priscus* (No. 784) described in this paper. It resembles the corresponding tooth of *Hyrachyus intermedius* (Princeton collection, No. 10,095). The anterior cross-crest is more nearly straight, and being broader at the base, makes the median transverse valley more narrow. The anterior inner cusp is more conical. The anterior outer style (parastyle) is not so much external to the anterior outer cusp. The posterior outer cusp (metacone) is small, thin, laterally com-

pressed and low. It is much lower than the other three principal cusps. There is a strong anterior cingulum and a weaker one on the outside of the outer exterior style.

MEASUREMENTS.

	Mm.
Length of M ³	13
Width of M ³	16
Height of antero-internal cusp.....	9

From Sage Creek about seven miles northeast of Lima.

METAMYNODON?

No. 734.

A horizontal ramus of a mandible with the alveoli and roots of the teeth.

This jaw is somewhat puzzling. It was found in the beds on Sage creek in a sandy lens or layer lower down than the stratum from which the *Hyrachyus*? tooth (No. 718) was obtained and not far away. This specimen if found in the White River would be unhesitatingly referred to the genus *Metamynodon*, though it is very much smaller than *M. planifrons*. But there is the same reduction in number of the incisors and premolars, the enormous enlargement of the canines, the great lengthening of the symphysis and narrowing of the premolars. In minor details, too, it is the same, about the only differences being the smaller size, the more procumbent position of the canines, and the thinner horizontal ramus.

The last incisors were quite large and in contact with the canines. There were probably second incisors, but they were very small. Part of the alveolus of one can be seen. The three premolars were all small. The root of the canines was very large and the two nearly came in contact. They occupied the greater part of the symphysis. There is a longitudinal convexity on the outer side of the one preserved. The symphysis extends backward to P₄ and the posterior part is wide.

One would not expect to find an animal apparently so like *Metamynodon* in the Middle Eocene, but the data are given for what they are worth.

MEASUREMENTS.

	Mm.
From anterior of canine to posterior of M_3	208
Length of symphysis.....	110
Width of posterior border of symphysis, between horizontal rami...	24
Width of jaw at canines	60
Depth " under P_2	50
Depth " " M_1	54
Thickness " " M_3	32
Length of canine.....	28
Width of canine.....	25
Length of diastema between C and P_2	36
Length of premolar series.....	46
Length of molar series.....	100

From Sage Creek about seven miles northeast of Lima.

OLIGOCENE.

WHITE RIVER.

REPTILIA.

HELODERMOIDES TUBERCULATUS gen. et sp. nov.

No. 707. Figs. 4 and 5.

Portions of the top of a skull and part of a mandible were found in the beds on Pipestone Creek near Pipestone Springs in Jefferson County.

The bone in the frontal region is thick and cellular, but is much thicker farther forward. The top of the skull, as in *Heloderma*, is

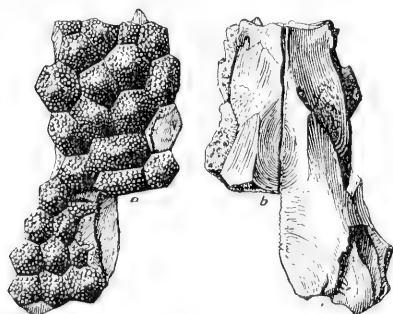


FIG. 4. *Helodermoides tuberculatus* (No. 707), White River Beds, Pipestone Creek. *a*, top of skull, upper view; *b*, the same, lower view. Natural size.

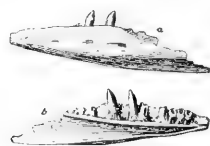


FIG. 5. Same as Fig. 4. Part of mandible. *a*, outer view; *b*, inner view. Natural size.

covered with bony ossicles. They are higher and more conical than in that genus, and instead of being marked with minute pits are covered with little rounded wart-like protuberances. The larger ossicles approach a pentagonal or hexagonal form at the base. Two, near the middle of the head, are elongated transversely. Anterior to these there is no bilateral symmetry in their arrangement or size. The posterior ones, as in *Heloderma*, are smaller than the anterior ones.

The mandible shows three foramina on the outer surface. The teeth, which are partly set in the jaw, are sharp, laterally compressed near the apex, and incline slightly backward.

Length of fragment of skull, 40 mm.

MAMMALIA.

PERISSODACTYLA.

MESOHIPPUS LATIDENS sp. nov.

No. 751. Fig. 7.

The type of this species is a portion of a crushed and flattened skull with the last premolar and the molars of both sides. It was found in the Lower White River beds near Three Forks in 1899.

The most striking distinguishing character of the teeth is the extreme transverse as compared with the antero-posterior diameter and the much greater width of the anterior than of the posterior portions. The teeth are more primitive than those of *M. bairdi*. The median tubercles of the anterior cross-crests are much larger than those of the posterior cross-crests.

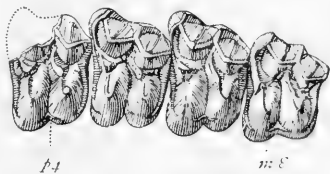


FIG. 7. *Mesohippus latidens* (No. 751). Last upper premolar and the three molars of left side. Natural size. White River beds near Three Forks.

The posterior intermediate cingular cusps are represented by only a minute enlargement or thickening of the cingulum. There are no cingula on the inner faces of the inner cusps except on M^3 . There are faint median ridges on the outer crescents. The posterior intermediate cusps on the cross-crests decrease in size from M^1 backward. On M^3 this cusp can hardly be distinguished from the cross-crests.

MEASUREMENTS.

	Mm.
Length of P ⁴ and the 3 molars.....	42
Length of molar series.....	32
Length of P ⁴	10
Length of M ¹	10
Width of M ¹	16
Length of M ²	11
Width of M ²	17
Length of M ³	11
Width of M ³	15.5

Found on Thompson's creek.

ARTIODACTYLA.

TRIGENICUS SOCIALIS gen. et sp. nov.

No. 817. Fig. 6.

In the autumn of 1901 the writer reëxamined a portion of the lower White River beds on Thompson's Creek near Three Forks. In a place where fragments of several skulls (including the types of



FIG. 6. *Trigenicus socialis* (No. 817), White River beds, near Three Forks. Natural Size. *a*, portion of skull; *b*, crown view of teeth.

Limnenetes platyceps and *L. ? anceps*) had been found, the anterior portion of another skull was obtained. It is laterally crushed at muzzle. It does not exactly correspond with anything that has been described, though it bears resemblance to several of the Uinta and

White River selenodonts. It looks as though it might be a descendant of *Leptoreodon*.

The dental formula is C^1 , P^4 , M^3 . All are large and strong, except P^1 , which is small, but two-rooted. It is separated from the canine and P^2 by diastemata. It is a little nearer to P^2 than to the canine. The canine is, so far as preserved, of the usual *Oreodont* pattern, but is more compressed laterally. P^1 is a laterally compressed subconical cusp. The crown from the outside has a slight hint of the trifid appearance of the same view of P^- and P^3 — that is, there are rudiments of anterior and posterior cusps or lobes. P^2 is large and has three outer lobes. It is widest back of the middle. P^- is a little longer and more triangular on account of the larger posterior inner lobe. P^4 is of the usual pattern in ruminants. Premolars 2 and 4 are nearly equal in length. Only portions of the molars are preserved, but the teeth are large. The teeth back of P^1 show much wear.

The infraorbital foramen opens above the anterior portion of P^3 , and the front margin of the orbit is above the anterior half of M^2 . So far as I can ascertain from the crushed condition in this region there were neither prelachrymal pits or vacuities.

MEASUREMENTS.

	mm.
From front of canine to front of orbit.....	50
Length of canine.....	4.3
Width of canine.....	3.3
Length of diastema between C and P^1	6
Length of P^1	3.5
Width of P^1	2
Length of diastema between P^1 and P^2	4
Length of P^2	7
Width " ".....	4
Length of P^3	9
Width " ".....	5
Length of P^4	7
Width " ".....	7
Length of M^1	7.5
Length of M^2	9

OREODON MACRORHINUS sp. nov.

No. 767. Fig. 8.

In my paper "Fossil Mammalia of the White River Beds of Montana" ¹ I described a species of *Oreodon* under the name of "*Oreodon*

¹ *Trans. Am. Phil. Soc.*, Vol. XX., p. 264.

robustum.'' I knew that the name had been given by Leidy to an individual belonging to *O. culbertsoni*, but considered the name still available. I propose for it the specific name *macrorhinus*.

The skull is not much if any longer than that of *O. culbertsoni* Leidy, but is very much heavier, and I think the differences are not

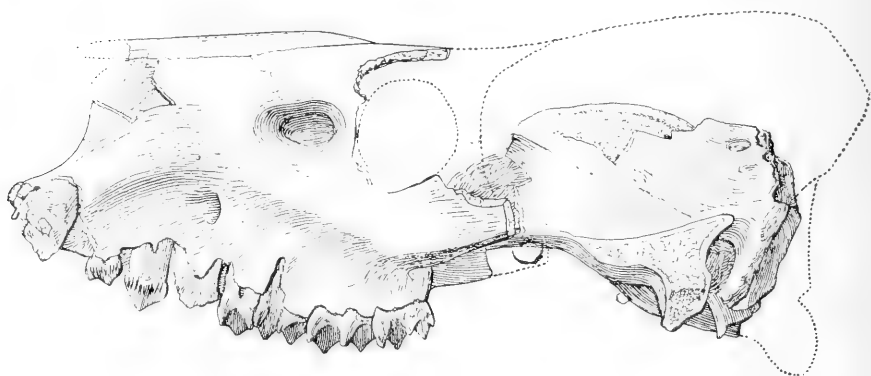


FIG. 8. *Oreodon macrorhinus* (No. 767), White River beds, near Toston, Mont.
One half natural size.

sexual. As seen from the side the muzzle tapers very little. The enamel on the premolar teeth is wrinkled.

The nodular beds from which this was taken undoubtedly correspond with the "Oreodon beds" of the plains region.

UPPER OLIGOCENE?

CARNIVORA.

MESOCYON? DRUMMONDANUS sp. nov.

No. 792. Figs. 9 and 10.

Of this dog there is the scapula, some fragments of other parts of the skeleton, and a skull lacking the mandible. It was found about three or four miles east of Drummond, near the Hellgate River.

As the lower teeth are not present it cannot be certainly referred to its proper genus. The species, however, is different from any I have seen. I cannot better define it than by showing how it differs from *Mesocyon coryphæus* Cope, and *Cynodesmus thoöides* Scott.

Compared with *M. coryphæus* it is somewhat smaller, not so much restricted behind the orbit; the sagittal crest is not so elevated; the

nasals do not contract so gradually to the apex; and judging by Cope's figure,¹ they are longer; the posterior points of the premaxillaries do not approach so near to the anterior projections of the frontals, the former being short fore and aft. The tympanic bullæ are smaller. The antemolars are less spaced; the incisors are crowded. According to Cope's figure P^2 , P^3 , and P^4 , exclusive of the heel, are wider but of the same length. The heel on P^3 and the deutercone on the sectorial are not so well developed; M^2 is much larger, the great difference being in the antero-posterior diameter.

Comparison with *Cynodesmus thoöides*.

The anterior part of the skull is lower and narrower; not so broad at the post-orbital angles of the frontals but broader at the post-orbital constriction; the temporal ridges converge less rapidly; the premaxillaries and frontals do not approach so near each other; the premolar teeth are smaller, much lower, and all except the first are shorter. The deutercone on P^4 is less prominent; the transverse diameter of the molars is less.

¹Tertiary Vertebrata, Pl. LXXI.



FIG. 9. *Mesocyon*? *drummondianus* (No. 792). Upper Oligocene? beds, near Drummond, Mont. Natural size. Side view of skull.

The basisphenoid is keeled. The brain-case is full and well rounded out. The zygomatic arch is not widely expanded. The frontals can hardly be said to have postorbital processes.

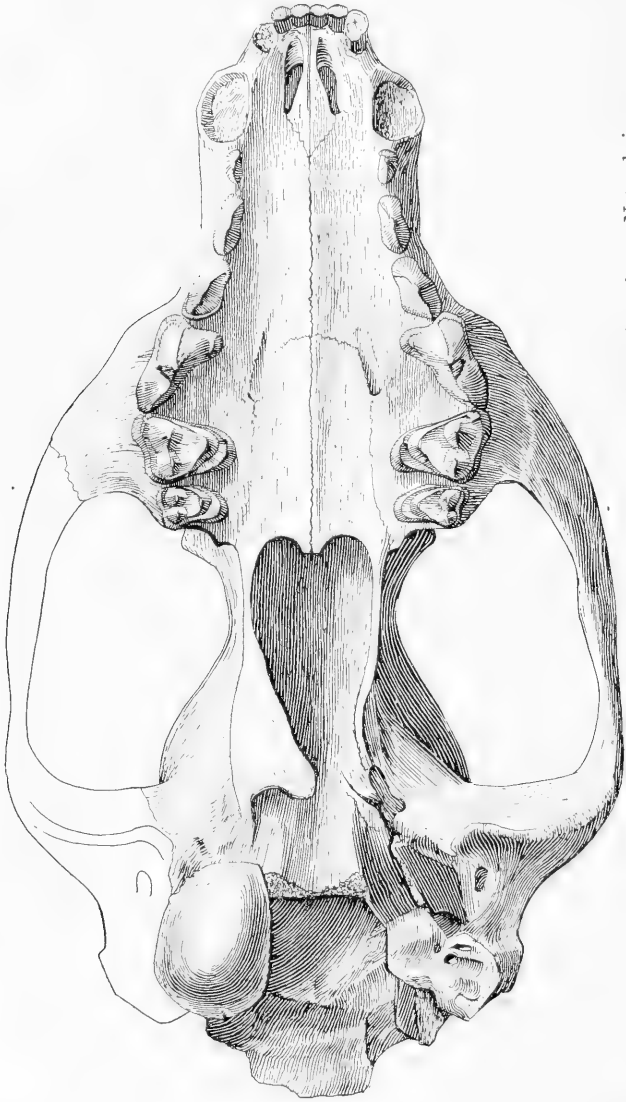


FIG. 10. *Mesocyon drummondianus*. Same individual as Fig. 9. Palate view. Natural size.

The auditory bulla is lost on one side and present on the other. This lends weight to the probability that the absence of the bullæ in some of the skulls of fossil dogs does not prove that the animals did not possess them in life.

MEASUREMENTS.

	Mm.
Length of skull to posterior of tympanic bulla.....	133
Width of skull, including zygomatic arches, greatest.....	80
Width at postorbital constriction.....	23
Length of molar-premolar series.....	51

ARTIODACTYLA.

LEPTOMERYX TRANSMONTANUS sp. nov.

No. 726. Fig. 11.

This is larger than *L. evansi* and the teeth more advanced, the infraorbital foramen is a little farther back than in the specimen described by Leidy in his Extinct Mammalian Fauna. It opens

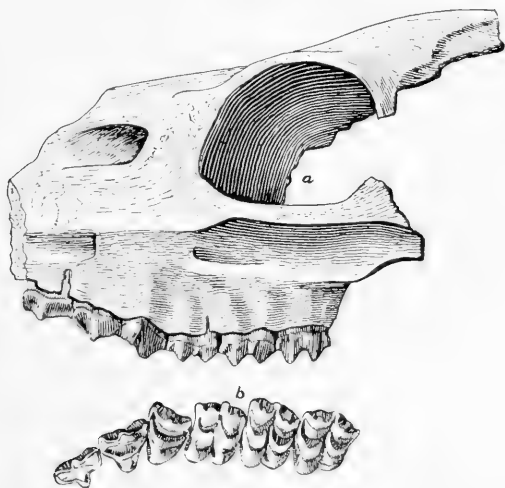


FIG. 11. *Leptomeryx transmontanus* (No. 726). John Day, near Drummond. Natural size. *a*, skull; *b*, crown view of teeth.

above the anterior portion of P³. There is a prominent malomaxillary ridge which extends forward on the face as far at least as the anterior part of P².

The teeth, judging by Leidy's figures,¹ differ in several particulars from those of *L. evansi*. In P^2 the deutocone is connected by a ridge with the posterior portion of the tooth and by a narrow cingulum with the anterior portion. P^3 is the same, except that the deutocone and the anterior cingular ridge are better developed. Thus the teeth are successively approaching the true ruminant pattern of the fourth premolar, which is fully attained in this species. The median and anterior outer pillars on the molars and the last premolar are not very prominent. The inner and outer crescents of the teeth are not very widely separated, yet the teeth are not so much worn as in the specimen figured by Leidy (Ext. Mam. Fauna, Pl. XIV., Fig. 5).

From the same beds as the specimen last described.

MEASUREMENTS.

	Mm.
Length of molars and last three premolars.....	41
Length of molar series.....	22
Length of premolar series.....	20
Length of P^2	7
Width of P^2	5.5
Length of P^3	7
Width of P^3	6
Length of P^4	6
Width of P^4	7
Length of molars each.....	7
Width of M^1	8
Width of M^2	9
Width of M^3	8
Height of orbit.....	21
Length of orbit.....	24

PROMERYCOCHÆRUS MINOR sp. nov.

No. 769. Fig. 12.

Of this species there is a large portion of a skull and mandible. The upper and posterior portions of the cranium are gone. All the teeth are represented except I^1 . It was found near Drummond, on the Hellgate River, in the same beds with *Leptomeryx transmontanus* and *Mesocyon ? drummondianus*.

I refer it provisionally to this genus principally on account of the form and size of the zygomatic arches. It seems to be intermediate

¹ Extinct Mammalian Fauna, of Dakota and Nebraska, Pl. XIV., Figs. 1, 4 and 5.

between *Epoecodon* and *Promerycocharus*. It is a small species of *Promerycocharus*, but larger than *Eucrotaphus*.

Dentition. — I_1 and I_2 are nearly equal in size, convex anteriorly and flat posteriorly. They are of moderate size. The upper canine is quite high, is flat behind with sharp edges. Near the tip it is triangular with three sharp angles, but nearer the root it is convex anteriorly. There is a concavity running lengthwise of the tooth in front

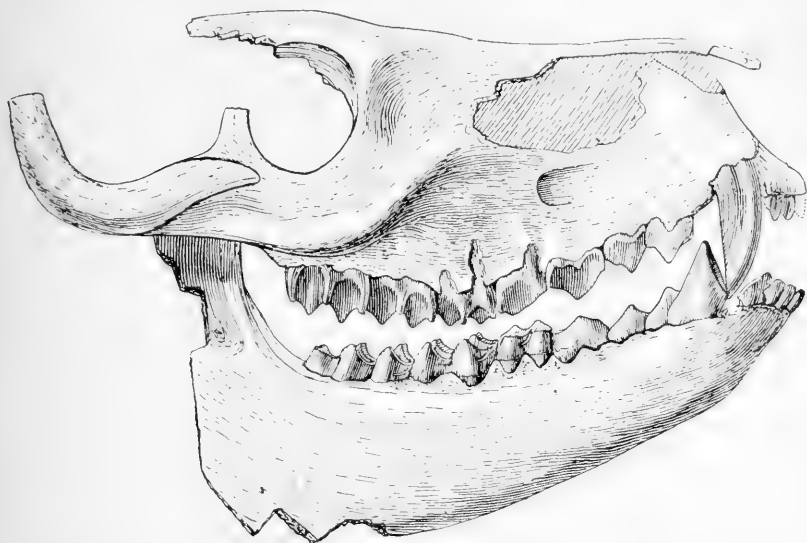


FIG. 12. *Promerycocharus minor* (No. 769). Upper Oligocene? near Drummond. Half natural size.

of the inner angle, but no high narrow ridge as in *Mesoreodon*. There is a short diastema between this tooth and P^1 . The latter is narrow and overlaps outwardly P^2 . Most of the teeth of the molar-premolar series are narrower transversely than in *Mesoreodon*. The anterior and median buttresses on M^2 and I_3 are narrow and not heavy.

I_2 and I_3 have nearly the same size and form, are chisel-shaped, convex on the posterior face, but rather thin antero-posteriorly. I_3 is larger. The incisiform canine is still larger, triangular in section and overlaps I_3 , the interior portion of its anterior face being behind the outer portion of that tooth. There is no diastema between the canine and caniniform P^1 . This premolar is laterally compressed, lenticular in section and sharp-pointed, having been made sharp by the wear on

the anterior edge by the upper canine. P^2 overlaps inwardly P^1 about half its length. It also overlaps outwardly P^3 .

The teeth might be called brachy-hypsodont. There is a pronounced tendency toward hypsodonty.

The Skull.—I cannot tell whether the premaxillaries were coössified or not, but they are deeper above I^1 than in *Promerycochærus montanus*. The infraorbital foramen opens above the anterior portion of P^1 . The forehead in front of the supraorbital foramina is concave. This is due in part, but, I think, not entirely to crushing. The nasals are long. The preorbital fossæ are not large or deep. The orbit is nearly circular. The zygomatic arch is moderately heavy, but not so much so as in *P. montanus*. The anterior portion below the orbit is not so high as in *P. montanus*, *macrostegus*, and *leidyi*, yet it is higher than in *Eucrotaphus* (*Eporeodon* ?) *superbus*. From its anterior part it expands posteriorly, reaching its maximum expansion a little anterior to the postglenoid process. The outer border is moderately thick and rounded. The posterior portion ascends less steeply than in *P. macrostegus* or *P. superbus*. The longitudinal portion is quite broad and long. The lower border of the malar under the orbit is longitudinally grooved. The bullæ were large, the paroccipital processes small. The lower portion of the latter has three protuberances on its surface, making it quite irregular. The upper portion does not appear to have been much expanded laterally.

MEASUREMENTS.

	Mm.
Length from front of canine to postglenoid process inclusive.....	185
“ of molar-premolar series.....	105
“ of premolar series.....	49
“ of molar series.....	56
Hight of malar under orbit.....	24
“ of orbit.....	24
Length of mandible to back of M_3	137
“ of lower molar-premolar series.....	115
“ premolar series.....	55
Depth of mandible under P_1	30

MIOCENE.

FLINT CREEK BEDS.

All the specimens from these beds described below were found near the village of New Chicago, in Granite County.

REPTILIA.

OGMOPHUS ARENARUM sp. nov.

No. 744.

Three vertebræ of a snake from the Flint Creek beds, were associated with many small bones and teeth, among which were the humeri of moles described in this paper.

The vertebræ not so long as broad. Centrum small, with no keel but a broad convexity on lower side. Ball transversely elliptical and facing somewhat upward as well as forward; neural canal arch-shaped with a median ridge or convexity on floor; the articular surfaces of the zygapophyses horizontal; articular surfaces of the zygosphenes quite narrow and facing outward and downward; neural spine low and not reaching to the anterior part of the neural arch; neural arch large and zygosphenes almost as far apart as its width; protuberance for articulation of the rib quite prominent, higher than wide, convex above and in front, and slightly concave on the posterior inferior surface. The interzygapophyseal ridges almost die out midway between the anterior and posterior zygapophyses.

Compared with *O. angulatus* Cope (Tert. Vert., p. 783, Pl. LVIIIa, Fig. 13) the protuberance for the articulation of the rib is larger, the vertebra proportionally lower, and there is no hypophyseal angle or ridge.

MEASUREMENTS.

	Mm.
Length of centrum of vertebra.....	4
Width of vertebra.....	5

MAMMALIA.

INSECTIVORA.

TALPA? PLATYBRACHYS sp. nov.

Type No. 728. Fig. 13.

In the same beds as the preceding (No. 744), associated with scattered teeth and bones of rodents and other small animals, four humeri of moles were found belonging to the same or closely related species. One of these is nearly complete and I take it as the type of the species.

The humerus is smaller than the corresponding bone of *Scalops aquaticus*. It differs from it in having a narrower shaft, in this respect

more resembling *Talpa meyeri* of Schlosser. There is a large surface for the articulation of the clavicle. This is convex dorso-ventrally. From the upper outer border a minute point projects outward. This is not nearly so well developed as in *Scalops aquaticus*. The condyle



FIG. 13. Humerus of *Talpa ? platybrachys* (No. 728). Twice natural size.



FIG. 14. *Mylogaulus paniensis* (No. 844). Flint Creek beds. $\frac{3}{11}$ natural size

or the scapula forms a quite high crescent-shaped ridge. The ridge for the insertion of the *pectoralis major* muscle is well developed on the inner part of the humerus, but does not extend anywhere near so far outward as in *Scalops*.

MEASUREMENTS.

	Mm.
Length of humerus.....	13
Width of proximal portion of humerus.....	11
Width of distal portion of humerus.....	8

RODENTIA.

MYLAGAULUS PANIENSIS? Matthew, Bull. Am. Mus. Hist.,

Vol. XVI., p. 299, 1902.

No. 844. Fig. 14.

A portion of a lower jaw containing the large premolar and one molar was found in the Flint Creek beds. This and the type have nothing in common except the premolar, but there is no essential difference in the two teeth. This individual was evidently somewhat younger than the type, as the premolar tooth is higher and the anterior outer enamel lake is longer.

There is one and only one prismatic molar, which was evidently persistent, as it is nearly or quite as high as the premolar. There is in this specimen no trace of a molar posterior to it. The upper surface is subcircular, approaching a pentagon. There are four enamel

lakes, two inner and two outer, but these are more oblique than in the premolar, inclining outward and forward.

The one persistent molar as distinguished from two that were often shed in older animals distinguishes this specimen from *M. monodon* and *M. ballensis*.

Found in Flint Creek beds near New Chicago, Mont.

MYLAGAULUS.

Isolated teeth. No. 732. Fig. 15.

A tooth, probably an upper premolar, from the Flint Creek beds, has the outer enamel well broken away, so that the structure of the tooth can be plainly seen. The enamel lakes which appear on the worn upper surface of the tooth are the tops of compressed enamel tubes which are closed at the bottom.

These tubes are transversely striated. See Fig. 15, *a*. A molar tooth, Fig. 15, *b*, shows the same structure.

The molar shows eight enamel lakes in four rows. Same locality as the preceding.

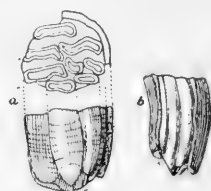


FIG. 15. *Mylagaulus* (No. 732), Flint Creek beds. Showing structure of teeth. Twice natural size. *a*, a premolar tooth; *b*, a molar tooth.

CARNIVORA.

ÆLURODON? *BRACHYGNATHUS* sp. nov.

No. 752. Fig. 16.

This is represented by a large part of a mandible and some portions of the upper jaw with all the teeth broken.

As indicated by the remains, the leading characteristics that distinguish this from all other dogs are the following: Face and horizontal portion of mandible greatly shortened yet without reduction in size or number of lower teeth. Mandible deep and robust. Especially heavy in region of symphysis. Teeth crowded and $P_{\frac{1}{2}}$ and $\frac{3}{3}$ set obliquely in the jaw.

The dental formula in the lower jaw and undoubtedly in the upper is the same as that of the modern dogs (*C. lupus*, etc.). The greater portion of the premaxillaries and small portions of the maxillaries show that for the length of the face the nasal region was broad, the anterior palatine foramina large. Incisors 2 and 3 were large; the canine medium sized. P^1 one-rooted, but not very small. The corresponding teeth of the lower jaw evidently had similar proportions.

The lower canine was set diagonally in the jaw. This is true of *C. lupus*, but not to so great an extent, the anterior face of the tooth presenting nearly as much outward as forward. The larger axis of the root of P_1 is in the same direction. P_2 , P_3 and P_4 have each a larger posterior root and a smaller anterior one. The anterior in P_2 and P_3 is partly exterior to the posterior. The roots are closely

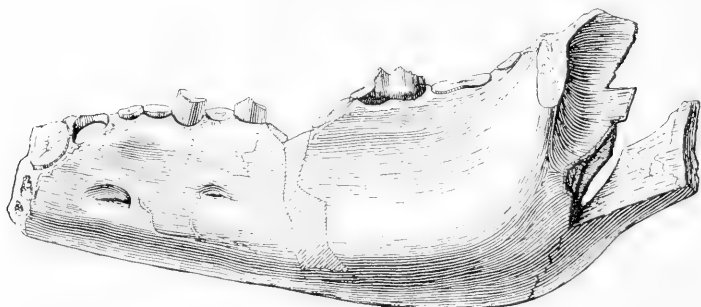


FIG. 16. *Æluroidon?* *brachygnathus* (No. 752). Flint Creek beds. Natural size.

crowded. The heel of the lower sectorial is mostly preserved, yet it is injured so that one cannot be certain whether the pattern is more like that of *Temnocyon* or of *Canis*.

There are two mental foramina, a larger under P_2 and a smaller one on a higher level beneath the anterior part of P_4 . The posterior portion of the lower border of the mandible in front of the angle is very convex antero-posteriorly. The anterior ridge of the ascending ramus in front of the masseteric fossa is large and high and the fossa deep.

MEASUREMENTS.

	Mm.
Length of molar-premolar series.....	58
Depth of mandible under P_1	19
Depth of mandible under P_2	28

SUIDÆ.

HESPERHYS gen. nov.

No. 748. Fig. 17.

Mandible short and heavy. Teeth uninterrupted except a short diastema between the canine and the anterior premolar. Inferior

dental formula $I_{\frac{3}{3}}, C_{\frac{1}{1}}, P_{\frac{3}{3}}, M_{\frac{3}{3}}$. Premolars $\frac{2}{3}$ and $\frac{3}{3}$ simple conical cusps. $M_{\frac{3}{3}}$ with a heel composed of several small cusps.

HESPERHYS VAGRANS sp. nov.

No. 748. Fig. 17.

The type of the genus and species is a large portion of a lower jaw exclusive of the ascending rami. It was associated with the bones of *Procamelus* in the Flint Creek beds. There are also some fragments of the skull.

$I_{\frac{3}{3}}$ is large and chisel-shaped. Near the root its antero-posterior is much greater than its transverse diameter. On its anterior face it is convex and on its posterior face concave with a median longitudinal

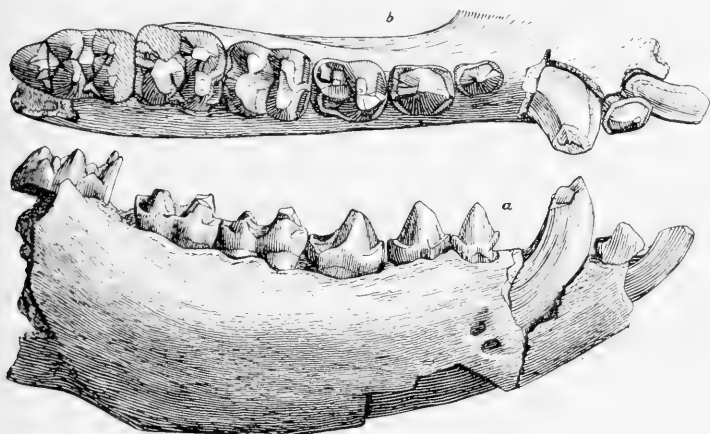


FIG. 17. *Hesperhys vagrans* (No. 748), Flint Creek beds, $\frac{1}{2}$ natural size. (a) Right ramus of mandible. Partly restored from the other side. (b) Crown view of teeth of the same. All the lower teeth are represented except the first incisor.

convexity. $I_{\frac{3}{3}}$ is low-crowned, conical, with a prominent inner cingulum. The canine is three-sided, the posterior side being nearly flat. It is slightly curving and points outward more than forward. $P_{\frac{2}{3}}$ and $P_{\frac{3}{3}}$ are high pointed, simple conical cusps with heavy cingula. $P_{\frac{3}{3}}$ is much larger than $P_{\frac{2}{3}}$. In $P_{\frac{4}{4}}$ the anterior portion is partly divided as if another large cusp had grown up outside of the protoconid. There is also a heel, but the tooth is not at all molariform. All the molars have four principal tubercles, but by the addition of inter-

mediate tubercles they increase in complexity backward. M^3 has a heel composed of one principal tubercle and three smaller ones. Not having access to the types I cannot be certain that this may not belong to some one of the Suidæ described but can find no descriptions that correspond to it.

MEASUREMENTS.

	Mm.
From front of $I_{\frac{1}{2}}$ to back of $M_{\frac{3}{3}}$	178
Depth of mandible under $M_{\frac{2}{2}}$	50
Thickness of mandible under $M_{\frac{2}{2}}$	31
Length of molar-premolar series.....	126
Length of premolar series.....	48
Length of molar series.....	78
Length of $P_{\frac{2}{2}}$	12
Width of $P_{\frac{2}{2}}$	9
Length of $P_{\frac{3}{3}}$	16
Width of $P_{\frac{3}{3}}$	12
Length of $P_{\frac{4}{4}}$	20
Width of $P_{\frac{4}{4}}$	16
Length of M_1	23.5
Width of M_1	19.5
Length of $M_{\frac{2}{2}}$	23.5
Length of $M_{\frac{3}{3}}$	31

From Flint Creek beds near New Chicago.

OREODONTIDÆ.

POATREPES PALUDICOLA gen. et sp. nov.

No. 845. Fig. 18.

A skull of an Oreodont found in the Flint Creek beds near the village of New Chicago is different from any other member of the family with which I am acquainted. The principal distinguishing characters are the following :

Skull elongated, not shortened as in *Merychys* and *Merycochærus*. Posterior portion of skull including occiput broad, zygomatic arches broad, heavy and spreading anteriorly, mastoid processes greatly expanded laterally, tympanic bullæ large but not rounded as in *Epo-reodon*, external auditory meatus forming a large wedge. Teeth brachy-hypsodont, molars narrow transversely.

To these may be added with a slight doubt : Large prelachrymal vacuities ; crest of occiput not much overhanging, premaxillaries not coössified. As the skull is somewhat mutilated and distorted I would

not be too positive about there being prelachrymal vacuities, but if not, there were certainly prelachrymal pits. On one side there is a large circular space anterior to the orbits which has no bone and the surrounding bone, in part, appears to be unbroken.

The skull is a little longer than that of *Mesorcodon chelonys* Scott. The nasals are lost. The malomaxillary ridge is high, very convex, extends upward as well as forward, dying out near the upper border



FIG. 18. *Poatrephes paludicola* (No. 845). Flint Creek beds. One half natural size. Right view of skull, part of teeth restored from other side.

of the maxillary just in front of the lachrymal depression or vacuity. The anterior borders of the premaxillaries are thick and they do not rise so abruptly as in *Mesorcodon* or *Eporeodon*. The prelachrymal vacuities appear to have been quite large. The sagittal crest was high as shown by impression on surrounding matrix. The anterior portion of the zygomatic arch beneath the orbits is broad, heavy, and widely spreading, the outer portion curving downward, with the border roughened and very concave antero-posteriorly. The anterior lower root is low, being only a little above the alveolar border. The orbit is closed behind by a heavy bridge of bone. The anterior tongue of the squamosal is long and slender, terminating beneath the posterior portion of the orbit. This process and the posterior process of the jugal overlap for a considerable distance. From opposite the glenoid surface the zygomatic arch ascends slightly to where it is broken off opposite the glenoid process. The anterior portion of the arch is broad and thick. It spreads far outward from the molars. The pos-

terior portion beneath is convex from the glenoid surface to the outer border. The glenoid surface is convex both antero-posteriorly and transversely. The post-glenoid process is broad transversely but not very thick.

The external auditory meatus is enlarged into a pyriform or wedge-shaped mass of bone with the apex pointing downward. Where this meatus is joined to the auditory bulla this process does not extend downward so far. The tympanic bullæ are large but not symmetrically rounded as in several of the Oreodonts. They differ on opposite sides of the same skull, and one is larger than the other. One is approximately a quarter of a four-sided pyramid, with the apex pointing downward. The other approaches nearer to a cube. Posteriorly the broad spout-shaped paroccipital processes clasp the bullæ closely, as if accommodating themselves to the forms of the bullæ. The paroccipital processes are rather thin antero-posteriorly, are concave in front and convex — nearly angulate — behind, but are much expanded laterally, as in *Merycochœrus laticeps*. The basi-occipital has a median ridge between the tympanic bullæ which widens as it approaches the occipital condyles. These condyles are small. Above the foramen magnum is a very convex median ridge bounded laterally below by two deep concavities.

The two anterior incisors, judging by the remains of the alveoli, were small, the third much larger. The canine was of medium size. Premolar four and the molars have extremely narrow valleys, but the teeth are much worn. The molars are narrow with no ridges on the outer median surfaces of the outer crescents. On the third molar the anterior and median pillars are prominent but there is no large accessory lobe at the postero-exterior angle, though there is a small one.

MEASUREMENTS.

	Mm.
Length of skull along palate, etc.....	225
Length of face from posterior margin of orbit.....	122
Width of skull at glenoid surface.....	152
Width of skull at orbits.....	155
Breadth of palate at same place, including molars.....	74
Length of upper molar-premolar series.....	96
Length of upper premolar series.....	50
Length of upper molar series.....	46
Width of M ₂	18

POATREPHESES?

No. 754.

In the summer of 1898 my traveling companion, Mr. Wm. T. Coffey, found in the Deep River beds near White Sulphur Springs a last premolar and three molars, with part of the maxillary of an *Oreodont* which probably belongs to this genus. It was found with part of a skeleton of *Palaeomeryx* and the incisors of some horse-like animal. The parts preserved differ very little from the teeth of the animal above described.

MERYCHYUS SMITHI sp. nov.

No. 766. Fig. 19.

Of this species there is the lower portion of the right side of the skull with parts of the mandible. The upper molar-premolar series is present and the lower series back of P_2 . The jaws have not been

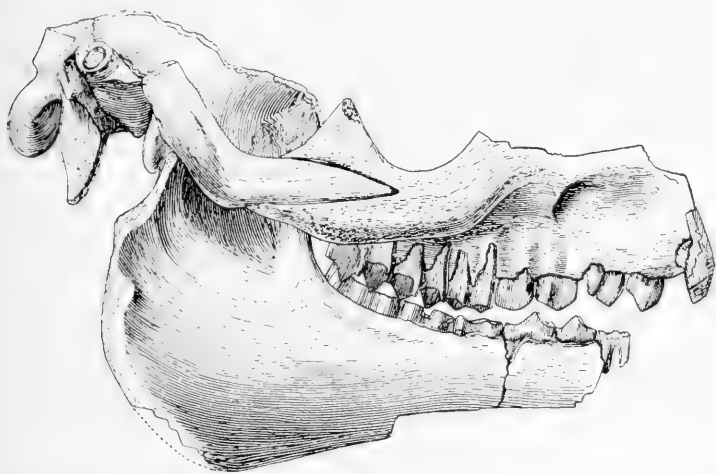


FIG. 19. *Merychys smithi* (No. 766). Flint Creek Beds. One half natural size. Part of mandible restored from other side.

separated and the grinding faces of most of the molars are still hidden.

The teeth are of the brachydont pattern and are much like those of *Poatrephes paludicola*, the species just described.

The upper canine was large. P^2 is two-rooted and separated from the canine by a short space. P_3 and P_4 are of the usual *Oreodont* pattern.

The skull, especially the facial portion, is short. The malar portion of the zygomatic arch is heavy and its lower border has two rounded angles. If the post-orbital processes of the jugal and frontal united at all they must have formed a very narrow bridge behind the orbit. The squamosal portion of the zygomatic arch rises quite abruptly from a little behind the malar. On the postero-inferior portion of this ascending portion is a long elliptical rugose convexity.

The *meatus auditorius externus* is peculiar. It opens backward, outward and upward, the outer portion being a short, large tube. Inward from this it is wedge-shaped, something like that in *Poatrephes*, but in this specimen the apex is turned forward and fits closely against the horizontal portion of the zygoma and the posterior portion of the post-glenoid process. It is possible that in one of these specimens the meatus is slightly displaced. There undoubtedly was a tympanic bulla, but it is lost. The paroccipital process has much the same form as in *Poatrephes*, but is not so broad. The occipital condyles and the foramen magnum are large. The orbit is large. The infra-orbital foramen opens above P^3 .

The portion of the mandible preserved is much like that of *Eporodon*. The lower border of the mandible slopes gradually backward to the angle. The masseteric fossa does not extend so far down.

MEASUREMENTS.

	Mm.
Length of upper molar-premolar series.....	88
Length of premolar series.....	43
Length of molar series.....	45
Depth of zygomatic arch under orbit.....	20
Width of auditory meatus antero-posterior.....	20
Width of paroccipital process.....	21
Width of occipital condyles.....	43
Width of foramen magnum.....	21
Depth of mandible under anterior portion of third molar.....	38

The name of this species is given in honor of my friend, Prof. F. D. Smith, who so kindly gave aid and encouragement in the collecting of fossils from these beds.

MADISON VALLEY BEDS.

PISCES.

No. 857. Fig. 20.

The only evidence of the occurrence of fish remains in this formation is the centrum of one of the anterior vertebræ. It represents a

large fish. It was found in the beds of sand and gravel about nine or ten miles south of Logan.

	Mm.
Length of centrum.....	21
Width " "	19

MAMMALIA.

RODENTIA.

SCIURUS sp.

No. 746. Fig. 21.

Part of a left mandibular ramus from the Loup Fork of the Lower Madison Valley.

This is about the size of the corresponding jaw of the black squirrel. The most noticeable peculiarities are the prominence of the ridge for the attachment of the inner part of the *masseteris lateralis* muscle, the anterior position of the anterior angle of the masseteric fossa, the length of the mandible anterior to the molars, and the anterior position of the mental foramen. The lower border of the anterior portion of the jaw as far back as the beginning of the angle is the arc of a circle.

The length of the molar-premolar series is less than in *S. vortmani*, and the mandible is not so deep. The premolar is the smallest tooth of the series, and the molars are nearly equal in size. The teeth are oblique as in *Arctomys*.

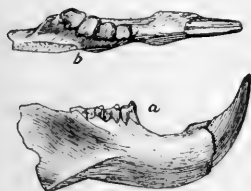


FIG. 21. *Sciurus* sp. (No. 746). Loup Fork, Madison Valley. Natural size.

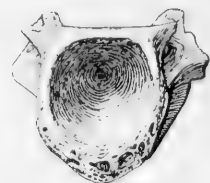


FIG. 20. Vertebra of fish (No. 857). Loup Fork, Lower Madison Valley. End view, natural size.

MEASUREMENTS.

	Mm.
Length of incisor to back of M_3	24
Length of molar premolars.....	9

SCIURUS ARCTOMYOIDES sp. nov.

No. 741. Fig. 22.

A small portion of a skull with the incisors and three anterior cheek teeth and the greater part of a mandible. It was with the skeleton of *Palæarctomys montanus* in the Loup Fork beds of the Lower Madison valley.

The upper incisors have a slight median longitudinal depression on the anterior surface, which is also covered with minute interrupted striations. The anterior premolar is minute. The last premolar is

many times larger but not nearly so large as M^1 . The teeth are intermediate between those of *Sciurus* and *Arctomys*, rather more resembling some species of the former. On P^1 and M^1 the three cross-crests are very distinct and the posterior cingulum is well developed. From the Loup Fork beds, Lower Madison Valley.

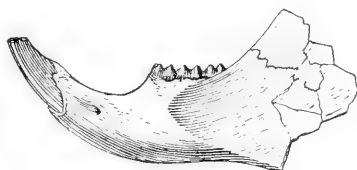


FIG. *Sciurus arctomyoides* (No. 741). Lower Madison Valley. Natural size.

The lower incisor is laterally compressed and has minute striations on the anterior face, like the upper ones. $P_{\frac{1}{4}}$ is smaller than any of the molars and has four tubercles. $M_{\frac{1}{4}}$ and $M_{\frac{1}{2}}$ have four tubercles each and minute inner and outer intermediate ones. The teeth are oblique, as in *Arctomys monax*, only not so much so. All the molars are nearly of the same size. The mental foramen is placed quite far forward, being considerably in advance of the premolar. The anterior angle of the masseteric area is higher than in *Arctomys* and extends far forward, being a little below the premolar.

MEASUREMENTS.

	Mm.
Length of the anterior upper cheek teeth.....	8
“ of last premolar.....	3
Width of last premolar.....	3.3
Length of lower molar-premolar series.....	16
“ from incisor to P^1	12
Depth of mandible under $M_{\frac{1}{4}}$	12

PALÆARCTOMYS gen. nov.

No. 740. Fig. 23.

Teeth nearly like those of *Arctomys*, but small in proportion to the size of the skull. Incisors large and strong, with many minute interrupted longitudinal striations and two or more larger convex ridges separated by shallow longitudinal furrows on the anterior faces. Skull large and strong anteriorly, in this respect differing much from *Sciurus* and *Arctomys*. Temporal ridges uniting farther forward at a

greater angle than in *Arctomys monax*. The most peculiar characteristic is the presence of two chambers opening posteriorly between the posterior nares and the posterior portion of the palate. I have not observed this in any other animal.

Palearctomys montanus is the type of the genus.

PALEARCTOMYS MONTANUS sp. nov.

No. 740. Fig. 23.

This species is represented by a large part of a skeleton found in the same beds as *P. macrorhinus*. The skull is longer in the present species. The upper incisors have more longitudinal ridges on the anterior faces; the transverse diameter is somewhat less and teeth are

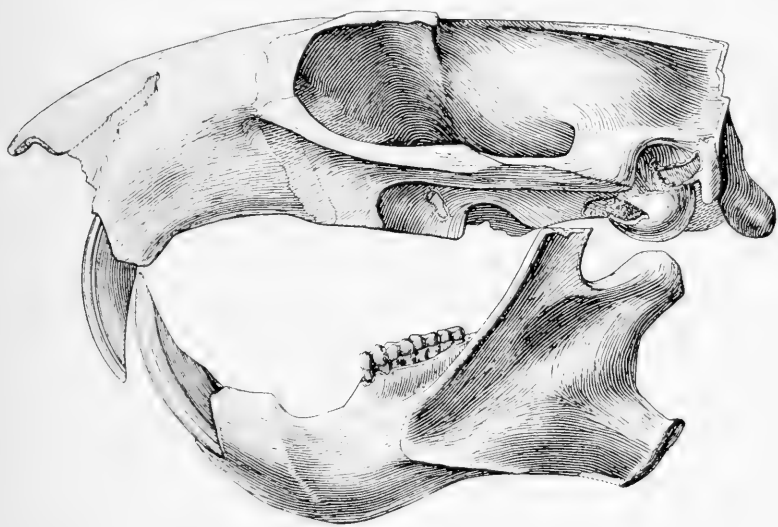


FIG. 23. *Palearctomys montanus* (No. 740). Lower Madison Valley. Skull and mandible. Natural size.

longer, *i. e.*, they project farther from the jaws. The skull does not differ greatly from that of *Arctomys monax* so far as shown except in what, for convenience, I will call the *post-palatine* cavities, and in the size of the muzzle. The incisors are very much larger than in that species. Not all of the skull is preserved.

The mandible resembles that of *Arctomys*, but is very much more robust. This is especially noticeable in the anterior part, where it is

very heavy, and in the condylar process. The symphyseal suture is large. The anterior part of the jaw is farther strengthened by a ridge which passes from the upper part of the symphyseal suture obliquely around the outside of the jaw backward and downward to the chin. The anterior border of the coronoid process slopes upward and backward uniformly, in a nearly straight line, to near the tip, where it is broken off. The lower teeth are much smaller than those of *Arctomys*. The other parts of the skeleton so far as preserved are much like those of *Arctomys*.

MEASUREMENTS.

	Mm.
Length of skull	100
Length from anterior of incisors to posterior of zygomatic arch.....	78
Width of skull at post-orbital constriction.....	21
Depth of snout just anterior to anterior root of zygomatic arches....	27
Depth just back of incisor.....	25
Width just back of incisor.....	32
Antero-posterior diameter of upper incisors.....	9
Transverse diameter of upper incisors	4.5
Length of mandible including incisor.....	70
Length of lower molar-premolar series.....	15.5
Depth of mandible of middle of symphysis.....	14.5

PALEARCTOMYS MACRORHINUS sp. nov.

No. 733. Figs. 24 and 25.

The type of this species is a skull, lacking the nasals and the posterior portion of the cranium. The skull is very robust and about the

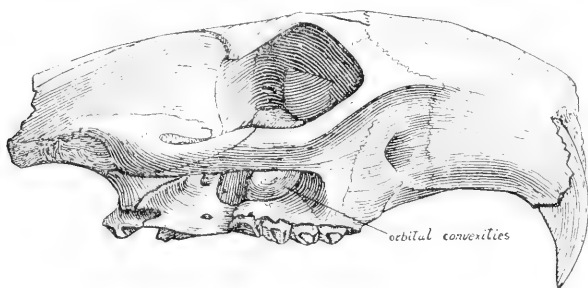


FIG. 24. *Palarctomys macrorhinus* (No. 733). Lower Madison Valley. Skull from right side. Natural size.

size of that of *Arctomys monax*, but the region in front of the orbits is very much deeper and wider. The incisors are also much larger.

Each has three longitudinal convexities on the inner face, also many minute wrinkles or discontinuous striations covering these.

The cheek teeth seem ridiculously small for such a large, robust skull. It seems that the animal was particularly fitted for gnawing, as *Mylagaulus* was for grinding or breaking hard substances. The third premolars (the first of the back teeth) are both shed, but the alveoli show that they each had but one small root.

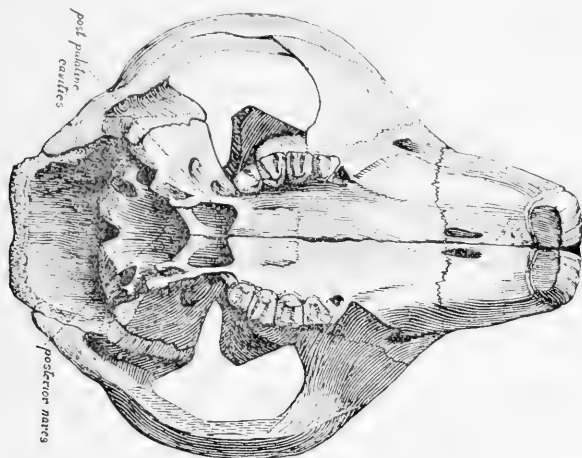


FIG. 25. Same as 24. Lower view of skull. Natural size.

The infraorbital foramina are vertical slits opening at the anterior roots of the zygomatic arches nearer the orbits and higher than in *Arctomys*. Above the molars and inside the zygomatic arch at the lower portion of the orbital fossa is a large convexity. Another is placed above and in front of it. At the posterior portion of the palate is another peculiar structure. There are two cavities between the posterior portion of the palate and the opening of the posterior nares. I am unable to determine in just what proportion the palatines and pterygoids enter into the formation of these cavities. The form is very well shown in the figure. They extend forward a short distance above the posterior portion of the palate. Whether they open anteriorly into the posterior nares is not quite certain, but if so the opening is small. The roof is thin. The posterior border is thick, rounded, and V-shaped. There is a thin partition partly separating

these cavities. The posterior opening of the nares is about the same size as in *Arctomys*, but it opens more downward, as the basisphenoid is more steeply inclined.

MEASUREMENTS.

	Mm.
Length of skull to posterior portion of zygomatic arch.....	63
Width of skull between orbits.....	30
Greatest width of skull including zygomatic arches.....	60
Depth of skull at anterior beginning of zygomatic arches.....	22
Width of palate between first molars.....	15
Length of molar-premolar series.....	16
Antero-posterior diameter of upper incisor.....	7
Transverse diameter of upper incisor.....	5

MYLAGAULUS COPE.

Several lower jaws and teeth of *Mylagaulidæ* from the Loup Fork of Montana throw considerable light on the tooth structure and the development of the characteristic dentition of this family. No skulls were found, but the upper dentition undoubtedly kept pace approximately with the lower. This is true of the species *Ceratogaulus rhinoceros* Matthew, and *Mylagaulus lævis* Matthew in the American Museum of Natural History.

The specimens here described may not all belong to the genus *Mylagaulus*, but they undoubtedly belong to the same family. I think it better to include all under *Mylagaulus* until more complete material is found.

In one specimen (*M. pristinus*) the erupting large premolar was apparently pushing out with its posterior portion a short-crowned, long-rooted tooth. Its anterior portion is replacing a tooth only a portion of one root of which remains. In two other specimens the large premolar has missed this short-crowned, rooted tooth; or the anterior portion of the latter has apparently been absorbed and its posterior portion still remains between the large premolar and the first prismatic molar.

There can be little doubt that this last rooted tooth is a *milk molar*. It is not at all prismatic, has long roots, is much worn in the young animal, and in one case is being shed. The permanent premolar and the two permanent molars are prismatic. In the descriptions which follow, the rooted tooth above described will be designated as the fourth temporary molar, $dm_{\overline{4}}$. If the above conclusions be true the large, permanent, prismatic premolar replaces two temporary molars.

In one specimen the posterior inner root of $dm_{\frac{3}{3}}$ is still preserved in place.

It appears, then, that the young of *Mylagaulus* has two milk molars. If all described below belong to *Mylagaulus* at a certain stage during the life of the animal, there are two milk molars and two permanent molars; while in some cases in old age there is only one tooth to take the place of all these—a large premolar. Thus it is not improbable that some individuals which had twenty teeth at one time of life were finally reduced to four.

The molar that is wanting in the adult animal is apparently the first, as there is no evidence of the loss of $M_{\frac{3}{3}}$. The development of the first molar is evidently prevented by the large, permanent premolar. Perhaps under favorable conditions rudiments of M_1 might be found.

MYLAGAULUS? PRISTINUS sp. nov.

No. 742. Fig. 26.

Mandible robust. Anterior and posterior angles widely separated, the former extending far below the lower border of the horizontal ramus and rounded, the latter oblique, high and projecting laterally far outward. Permanent premolar large, very high, and with short roots. The fourth temporary molar, which is retained in the present specimen, is short, low, and has long roots. Molars $\frac{2}{2}$ and $\frac{3}{3}$ are of moderate size and hypsodont. The enamel inflections and lakes on the last temporary premolar and the two molars are either antero-posterior or oblique.

The large permanent premolar, though quite young, is somewhat worn on the grinding surface. It has six enamel inflections, most of which are oblique. To ascertain the form of the enamel pattern farther down, the tooth was sawn in two about half way from the top of the crown to the root. Here, as shown in Fig. 26, *c*, the pattern is exactly that of *Mylagaulus*. There are five approximately longitudinal lakes in three rows, as in *M. paniensis*.

$M_{\frac{2}{2}}$ is nearly worn out. It is closely crowded against the premolar, and on the anterior portion next to this tooth the enamel is absent. Like the corresponding tooth in specimen No. 723, to be described later, it looks as if the anterior portion of the tooth has been absorbed. If the animal had lived the tooth would evidently soon have been shed. $M_{\frac{2}{2}}$ is prismatic and quite high though its lower portion cannot be seen. $M_{\frac{3}{3}}$ cannot be very high on account of its proximity

to the posterior portion of the incisor. It is undoubtedly much like the corresponding tooth of No. 723.

It is possible that in old age one or both of these molars were shed, leaving only the prismatic premolar, as seen in *M. monodon*, or this tooth and $M_{\frac{2}{2}}$ as in *M. paniensis*?

This species differs from *M. monodon* in the size of the permanent premolar, in the number of enamel inflections, in the angle of the mandible, and in the condyle. The posterior angle is not just like anything I know in any rodent. It projects outward and is twisted

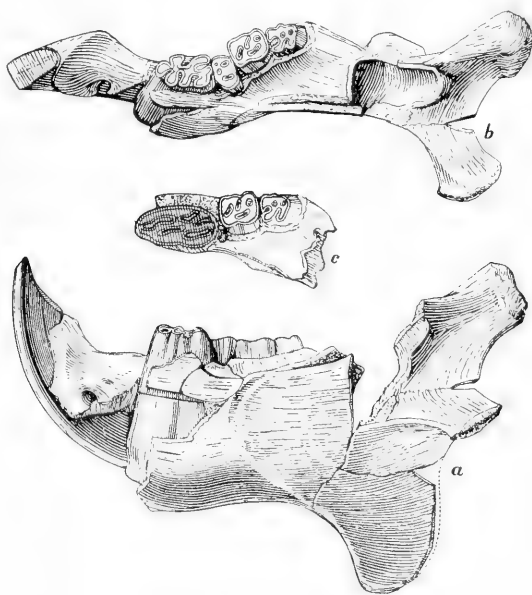


FIG. 26. *Mylogaulus? pristinus* (No. 742). Lower Madison Valley. Left ramus of mandible. $\frac{2}{3}$ nat. size. *a*, side view; *b*, the same, top view showing crowns of teeth; *c*, the same showing section of $P_{\frac{1}{2}}$ at place indicated in *a*, where the tooth was sawed in two.

on itself so that anterior surface faces upward and forward more than outward. This terminates in a lenticular-shaped surface facing downward, backward and outward.

MEASUREMENTS.

	Mm.
Length of mandible from anterior of incisor to posterior of condyle	45
Length of back series of teeth.	13.5

Depth of mandible at prismatic premolar	13
Depth of mandible from top of condyle to bottom of angle.....	30
Height of premolar	14
Length of premolar at alveolar border	6
Length of M_2	4
Width of M_2	3
Length of M_3	3
Width of M_3	2.5

Found in bluffs of Lower Madison valley, Montana.

MYLAGAULUS PROXIMUS sp. nov.

No. 842. Fig. 27.

Part of a mandible with the anterior portion and the angle gone. It is smaller and less robust than the corresponding part of *M. proximus*, not being so deep, so thick, or so long. The condyloid process is shorter and not so broad antero-posteriorly, and the articular process is broader transversely. This is a somewhat younger animal than the preceding.

When the animal died the large permanent premolar was erupting and had nearly reached the alveolar border. This tooth, being much larger than its two predecessors, the portion of the jaw containing the roots of the latter had to be absorbed. A small part of this alveolar portion, with one root of the anterior temporary molar remains above the postero-external portion of the large premolar. The last temporary molar being unreduced in antero-posterior diameter was being pushed out by this new tooth. This last temporary molar has a larger grinding surface than that of *M. proximus*, but is low, nearly worn out, and has two long slender roots.

P_4 is not as large, but it would undoubtedly have become larger as there is a considerable space between its posterior border and the anterior border of M_7 . This last tooth is long vertically on account

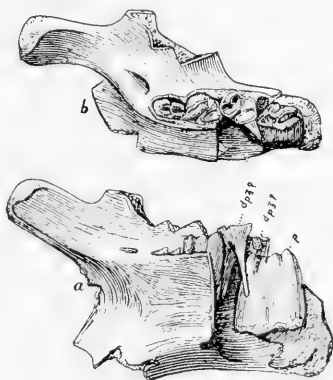


FIG. 27. *Mylagaulus proximus* (No. 842). Lower Madison valley. $\frac{3}{2}$ natural size. *a*, inner view of portion of mandible. The large permanent premolar eruption. *b*, the same, upper view; *P*, permanent premolar; *dp*₃, *dp*₄, temporary molars.

of its greater age, longer than the premolar. It appears to be open below and not to have completed its growth. It is very doubtful if this tooth would be shed during the lifetime of the animal. It had not yet come into use, at least it is not worn, though it projects some distance above the alveolar border. $M_{\frac{3}{2}}$ was just erupting. Evidently the two temporary molars and the two permanent ones were about equal in length and width.

MEASUREMENTS.

	Mm.
Depth of ramus under last molar.....	11
Length of dental series.....	13
Antero-posterior diameter of immature permanent premolar.....	6
Length of $dm_{\frac{1}{2}}$ and $ms_{\frac{1}{2}}$ and $\frac{3}{2}$ each.....	3

Same beds as the preceding.

MYLAGAULUS sp.

No. 723. Fig. 28.

This specimen, which is a portion of a lower jaw, has lost the prismatic premolar, which judging by the inner portion of the alveole,

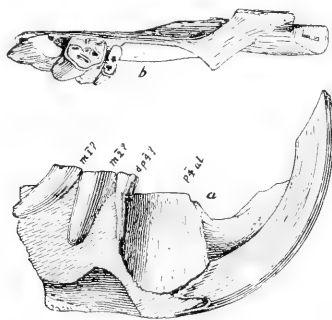


FIG. 28. *Mylagaulus*? (No. 723). Lower Madison valley. $\frac{3}{2}$ natural size. *a*, portion of jaw showing alveolus of $P_{\frac{4}{2}}$, $dp_{\frac{4}{2}}$ and $M_{\frac{2}{2}}$? $M_{\frac{3}{2}}$?; *b*, crown view of same, $P_{\frac{4}{2}}$; *al*, alveolus of permanent premolar, $dp_{\frac{4}{2}}$ temporary premolar.

was proportionally as large as in the specimen just described. The last temporary premolar is much reduced, as if by partial absorption, as in the specimen of *M. proximus* (No. 842). Its antero-posterior is half its transverse diameter. The crown is nearly worn down to the roots. $M_{\frac{2}{2}}$ is not so high as in *M. pristinus*. $M_{\frac{3}{2}}$ is still lower. Both the molars might be shed in old age.

MEASUREMENTS.

	Mm.
From front of incisor to back of $\overline{3}$	26
Length of alveolus of permanent premolar.....	6
Length of dp_1	1.2
Width " "	3

From the Lower Madison Valley.

MYLAGAULUS PANIENSIS?

No. 731. Fig. 29.

A separate permanent premolar (No. 731) found in the lower Madison Valley beds, may belong to the above named species. It is figured to show the partial covering of cement which is quite thick on the middle portion of the tooth, but thins out to wards the top, so that the enamel is nearly bare.

RODENT.

No. 802.

An incisor tooth from the Loup Fork beds of the Lower Madison valley indicates a large rodent—larger than the existing beavers. Judging by its curvature it is an inferior incisor. On the anterior surface there are about a dozen small longitudinal striæ with still smaller cross-striations. The striated enamel surface reaches from the anterior inner angle of the tooth, where it is bounded by a longitudinal groove, to near the middle of the outer surface, where it ends abruptly, this surface being somewhat elevated above the surface just posterior to it. The antero-posterior is much greater than the transverse diameter, making it less near an equilateral triangle in section than the corresponding tooth of the Beaver, *Castor canadensis*.



FIG. 29. *My-
lagaulus paniensis?*
(No. 731). Lower
Madison valley. $1\frac{1}{2}$
natural size. *a*, per-
manent premolar, side
view; *b*, same, crown
view.

	Mm.
Antero-posterior diameter of tooth	12
Transverse diameter.....	8.5
Length of portion of tooth preserved.....	80

CARNIVORA.

MUSTELA? MINOR sp. nov.

No. 848. Fig. 30.

The type is a left mandibular ramus, lacking the incisors, the coronoid process and the condyle. It was found in a clay cliff near the bottom of the Loup Fork beds in the Lower Madison Valley. It is smaller than the corresponding part of *M. ogygia* Matthew,¹ being a

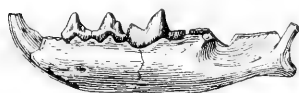


FIG. 30. *Mustela minor* (No. 848). Lower Madison valley. Left ramus of mandible. $\frac{3}{2}$ natural size.

little over one half the length. The canine is semi-procumbent. There were three premolars. P_2 is lost, but its two minute alveoli can be seen; the anterior one is confluent with that of the canine. P_3 has a rudimentary heel. In P_4 the heel is better developed and there is a small accessory cusp

on the posterior outer side of the protoconid. There is also a small anterior rudimentary cusp. The carnassial has a well-developed inner cusp. M_2 was small and set partly in the ascending ramus. The angle of the jaw is nearly like that of the common weasel. The masseteric fossa is very deep.

I am in doubt whether this should be placed in the genus *Mustela*, as it differs from most or all of the known species in having only three crowded premolars and having a well-developed metaconid on M_1 . There are other slight differences.

DINO CYON OSSIFRAGUS sp. nov.

No. 790. Figs. 31 and 32.

Portions of the skull and teeth of this large carnivore were found in a sandy stratum in the Loup Fork beds of the Lower Madison Valley. Enough of the fragments have been fitted together to give some idea of the great size of the animal. Judging by the parts preserved it was much larger than the grizzly bear, but not quite so large as the cave bear, *Ursus spelaeus*. The skull was evidently not less than seventeen inches in length and probably considerably longer. The length of the last upper premolar and the two molars is nearly the same as that

¹Fossil Mammals from Colorado. *Memoirs Am. Mus. Nat. Hist.*, Vol. I., Part VII., p. 383, Figs. 8 and 9.

of the corresponding teeth of *Amphicyon major* which is figured in de Blainville's Osteographie.

The face is short and the teeth crowded together without disastemata. The last three premolars are preserved and there appears to have been a small first premolar. A part of the posterior portion of

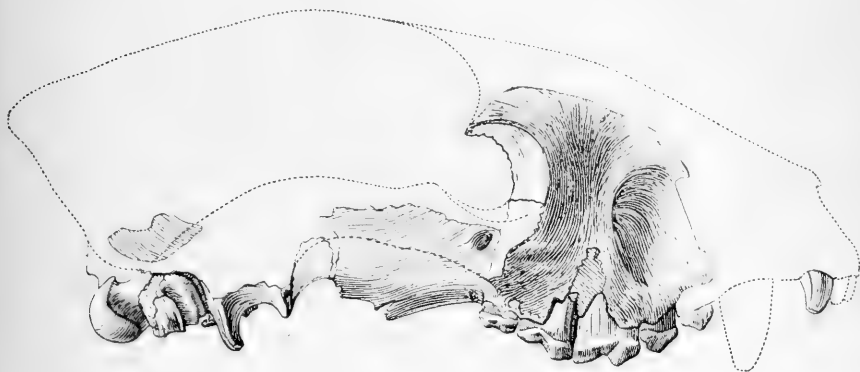


FIG. 31. *Dinocyon ossifragus* (No. 790). Lower Madison valley. One fourth natural size.

the alveolus of the canine is present and is but a slight distance in front of P^2 . What appears to be a small portion of the alveolus of P^1 is also preserved, but it must have been small and crowded between the canine and P^2 . The posterior portion of the skull, especially the mastoid portion, is massive. The mastoid and postglenoid process are bear-like, while the teeth have the general pattern of those of the dogs, but are low, strong, blunt, and simple, as if formed for grinding and crushing rather than for cutting. The worn condition of the teeth shows further evidence of this.

There is a deep concavity in the face posterior to the root of the canine and anterior to the infraorbital foramen. The foramen opens into this concavity. It is above P^1 , is oblong-elliptical, and opens forward and upward.

Just above the foramen magnum the occipital projects backward and is separated into two lateral concavities by a deep median groove. The occipital condyles are broad and the articular faces quite widely separated below although this character is not shown in the figure. The basioccipital has a sharp narrow median ridge and there are two lateral convexities about one inch forward of the condyles.

The dental formula, as previously indicated, was probably I^3 , C^1 , P^4 , M^2 , though possibly there were but three premolars.

The third incisor—the only one preserved—is caniniform, and posteriorly there is a groove worn by contact with the lower canine. P^2 is oblong, the apex being anterior to the middle. P^3 is much longer and the posterior portion is broader than the anterior. P^4 has no anterior inner cusp, but there is a broadening of the crown with a

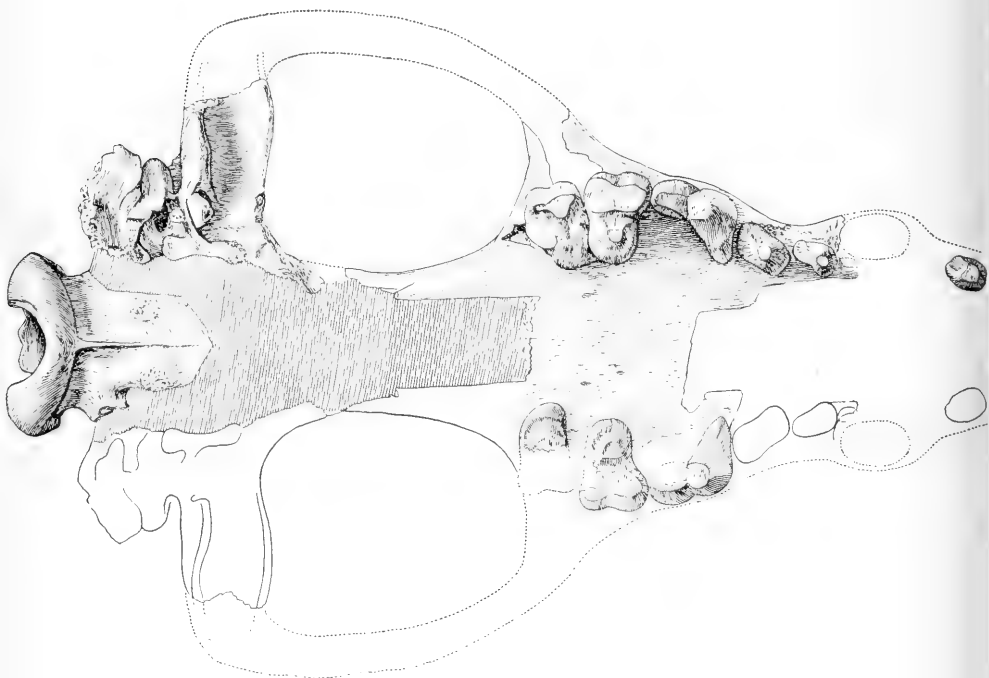


FIG. 32. *Dinocyon ossifragus* (No. 790). Loup Fork, Lower Madison valley. $\frac{1}{3}$ natural size.

gentle slope to accommodate the inner root. M^1 is broad, its transverse being far greater than its antero-posterior diameter. The outer cusps are worn down to two slightly convex areas. The inner cusp is low and crescent-shaped. The inner cingulum is broadest and most prominent postero-internally to the inner cusp, where it forms a large evenly convex ridge. The second molar on the right side does not appear to be a normal tooth.

I include this provisionally under *Dinocyon* on account of the number of upper molars, and the shortness of the face.

MEASUREMENTS.

	Mm.
Length of the last 3 premolars and the 2 molars.....	126
Length of P ²	17
Width " "	11
Length of P ³	23.5
Width " "	15
Length of P ⁴	35
Width " "	23
Length of M ¹	30
Width " "	41
Width of occipital condyles.....	72
" " foramen magnum.....	28

PERISSODACTYLA.

APHELOPS? CERATORHINUS sp. nov.

No. 857. Figs. 33, 34 and 35.

Part of the skull, mandible and limb bones of one individual were found together, in the Lower Madison valley, about five miles south of the town of Logan. Other portions of skeletons were obtained

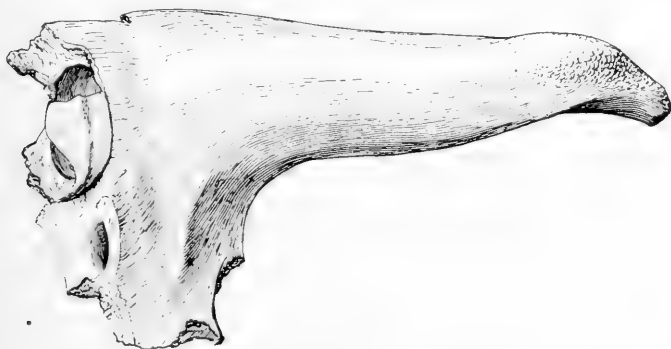


FIG. 34. *Aphelops? ceratorhinus* (No. 857). Nasals. Loup Fork. $\frac{1}{3}$ natural size.

which may belong to the same species, but they are not now accessible.

Size large. Nasals long, heavy, and horn-bearing. Molars and P⁴ with anterior process to posterior cross-crests. P¹ small, the others

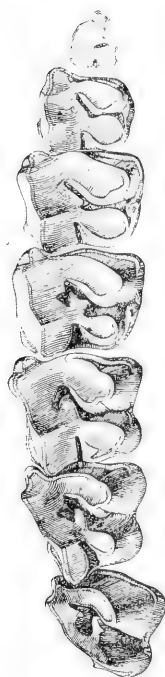


FIG. 33. The same individual; Upper teeth of right side. $\frac{1}{3}$ natural size.

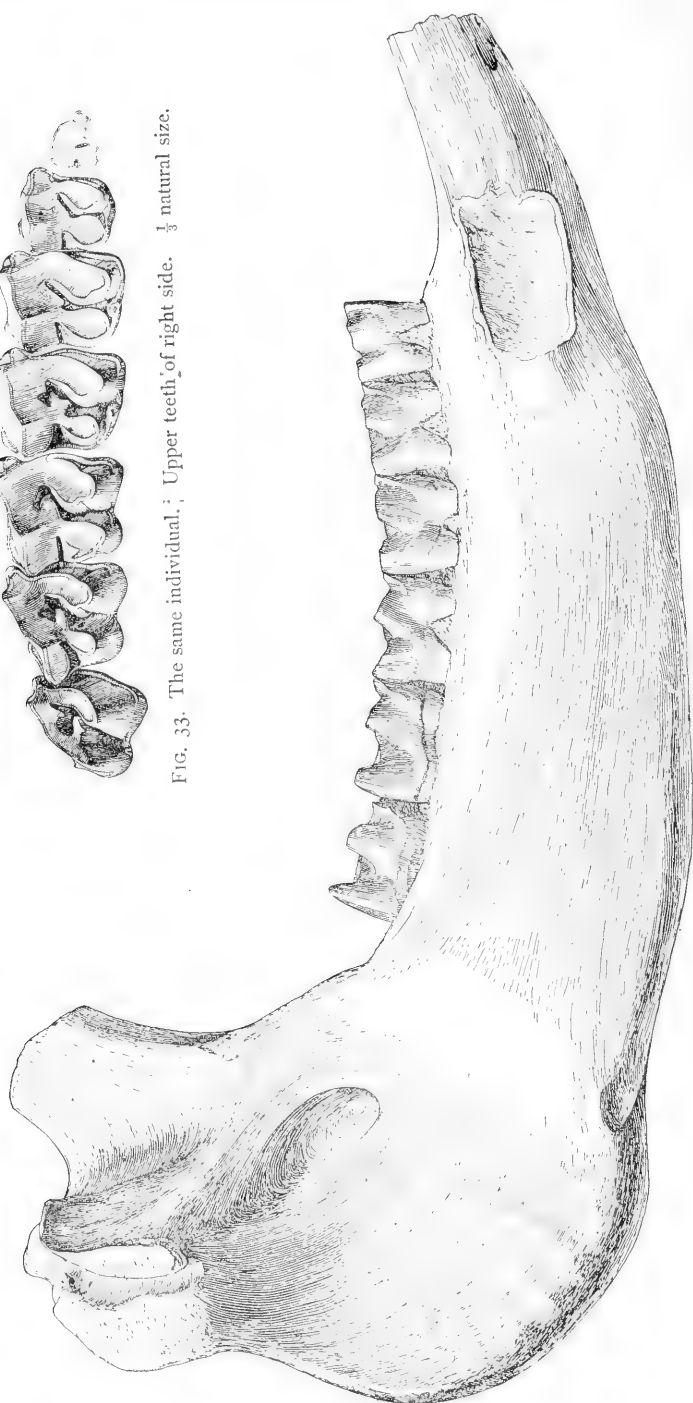


FIG. 35. *Aphelops? ceratorhinus* (No. 857). Loup Fork. Left ramus of mandible. Inner view. $\frac{1}{3}$ natural size. Symphyseal region not correctly shown in figure.

with cingula around posterior cross-crest. Small, inner, median, intermediate tubercles on P^2 and 3 . Mandible long and slender.

The teeth are much like those of *A. malocorhinus*, but the nasals are different. On the top near the extremities are convex rugosities indicating the presence of horns.

MEASUREMENTS.

	Mm.
Length of nasal processes.....	178
Length of upper molar premolar series.....	268
Length of lower molar premolar series	250
Length of mandible to anterior of P_3	440
Depth of mandible under M_3	108
Depth of mandible under P_3	84

ARTIODACTYLA.

PALÆOMERYX? BOREALIS?

No. 806.

A portion of the middle upper portion of a skull with the bones broken off at the bases agrees in every particular shown with *Palæomeryx? borealis* from the Flint Creek beds, and it undoubtedly belongs to the same genus if not the same species.

MERYCODUS? NECATUS? Leidy.

No. 857. Fig. 36.

Part of an antler from the Madison valley is much like the one figured in Leidy's Extinct Mammalian Fauna as *Cervus warreni*. It is longer and the burr is higher above the base.

MERYCODUS?

No. 804. Fig. 37.

This is quite different from the preceding. It is much larger and proportionally higher. The burr is very large

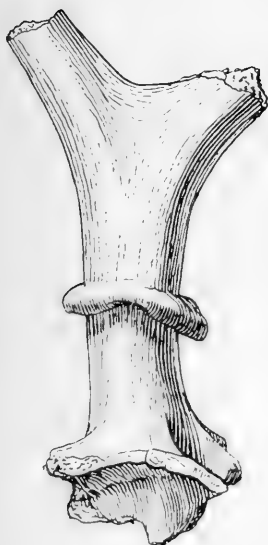


FIG. 36. *Merycodus? necatus?* (No. 857). Portion of antler. Loup Fork. Lower Madison Valley. $\frac{3}{4}$ natural size.

and is nearer to the base of the antler. Above the burr the surface is much roughened.

PROBOSCIDEA.

MASTODON.

No. 785.

In the collection from Loup Fork beds of the Madison valley is the mandible of a young mastodon, which is of interest on account of its possessing the milk dentition. On one side the first premolar is present. It is a small tooth, only a fraction of the size of the succeeding one. It is elliptical in section, being longer than wide. The anterior portion is conical. Back of this and separated by a shallow transverse groove is a double heel or perhaps a rudimentary cross-crest, which by another slight groove is divided on top into two lateral tubercles, the outer one being the larger. $dp_{\frac{2}{2}}$ is worn on the grinding surface. There were two principal cross-crests: the posterior ones are the larger, and the outer portion of the latter is much larger than the inner portion. Three small circular spots where the enamel is worn through indicate three tubercles on the anterior portion of the tooth. There was also a posterior median tubercle behind the posterior cross-crest, and on the outer side of this a smaller mammillary tubercle.



FIG. 37. *Merycodus?*
(No. 804). Portion of
antler. Lower Madison
valley. $\frac{3}{4}$ natural size.

On $P_{\frac{2}{3}}$ there are three principal cross-crests with at least two anterior and two posterior accessory ones. The principal cross-crests are high and unworn, and each is composed of two principal tubercles. The inner ones are the larger. Of the two posterior tubercles composing the heel the inner one is slightly the larger.

$P_{\frac{1}{4}}$ was still buried in the base of the ascending ramus back of $P_{\frac{2}{3}}$, showing the mode of succession to be just as in modern elephants. It was composed of three principal high cross-crests each with two cusps, as in $P_{\frac{2}{3}}$ and the tooth was nearly of the same size.

The symphysis was quite long. The distance from the symphysis to P_1 is about the same as the length of $P_{\frac{2}{3}}$.

The mandible is that of an individual so young that I cannot at present assign it to any species.

EXPLANATION OF PLATE.

Contact showing unconformity between White River and Loup Fork beds, near Big Round Top about nine miles north of Logan, Lower Madison valley, Montana.

The lower distinctly stratified beds are White River and at adjacent localities numerous fish remains were found. The upper less regularly stratified beds are Loup Fork and contain fossil plants and mammals.

CARNEGIE MUSEUM, February 25, 1903.





Contact between White River and Loup Fork, near Logan, Montana.

VI. DESCRIPTION OF A NEW GENUS AND SPECIES OF TORTOISE FROM THE JURASSIC OF COLORADO.

By O. P. HAY.

PROBAËNA gen. nov.

This genus and species is based on a single specimen, which was collected in Jurassic deposits, more specifically, in the lower portion of the Morrison, or *Atlantosaurus*, beds, in the "Marsh Quarry," on the Felch ranch, eight miles north of Canyon City, Colorado. The specimen has been kindly put into my hands by Prof. J. B. Hatcher, Curator of the Department of Vertebrate Palæontology of Carnegie Museum, Pittsburgh, Pa., to which institution it belongs, and by whose collector it was secured in 1901. Its museum number is 917.

A genus closely related to *Baëna*, but with a more depressed carapace, the hinder border of which is little or not at all notched. Vertebral scutes broader than the costal scutes. Plastron with its hinder lobe rounded. A fontanelle (permanent?) between the inner ends of the mesoplastra.

PROBAËNA SCULPTA sp. nov.

Pl. III, Figs. 1 and 2.

The specimen is a small and somewhat imperfect turtle, being represented by about three-fourths of the carapace and the greater portion of the plastron. The length of the carapace is, at present, 105 mm., and this is very near the original length. The width is 70 mm. The shell has apparently been rather flat, but it was doubtless somewhat less so in life than at present. The greatest distance between the upper and the lower surfaces is now 27 mm. The borders of the carapace behind the inguinal notches are considerably flared upward, but this may be due somewhat to post-mortem distortion. This border appears to have been little or not at all notched, except in the midline behind, where there is a slight excavation. In the nearly smooth hinder border this genus differs from the species of *Baëna*.

Most of the sutures and of the epidermal sulci are obscure; and in most parts of the carapace the sutures are incapable of determination. The sulci bounding the second, third, and fourth vertebral scutes are satisfactorily seen. These scutes have been very broad, each about

34 mm.; while the costal scutes have been only about half as wide. The areas occupied by the median scutes are conspicuously sculptured. The sculpture, as shown by the third scutal area, consists of ten or twelve prominent, sharp, uneven, ridges, which radiate forward and outward from the middle of the hinder border of the area. Evidently, a somewhat similar, but less bold sculpture has characterized the areas of the costal scutes; but these surfaces have been injured so that it cannot be described. There is no evidence of the presence of supra-marginal scutes.

On the left side the costal and marginal plates have been broken away. The anterior and posterior buttresses of the plastron have thus been revealed; and it is evident that the anterior one, joining the second costal plate, projected inward a considerable distance, as in *Baëna*, to form the anterior boundary of a lateral chamber, whose posterior boundary was formed by the hinder buttress joining probably the sixth costal plate.

When the costal plates broke away the extremities of the third, fourth and fifth ribs were left adhering in the matrix. These have evidently passed downward deeply against the inner sides of the corresponding marginal plates, as in *Chelydra*. Such was probably not the condition in *Baëna*. The ends of the ribs are terete, not flat as in most other cases. So far as can be determined, there were no fontanelles between the costal plates and the marginals.

Of the plastron all is present except the epiplastrals, and possibly the anterior part of the entoplastron. The plastron resembles closely that of *Baëna*; but the hinder lobe is not excavated posteriorly, but rounded. There is a considerable fontanelle between the inner ends of the mesoplastra. The presence of this may be due to the immaturity of the specimen; but judging from the closeness of all the sutures of our specimen, and from the fact that in *Baëna* the bones soon coössify, it seems probable that the fontanelle would persist till a late period of life.

The anterior, as well as the posterior, lobe has a width at the base of 36 mm. The posterior has a length of 30 mm., and the anterior has probably been about as long. The posterior lobe diminishes in width rather rapidly backward. The entoplastron has been unusually long and narrow in its hinder portion. Nothing can be determined regarding the presence of intergular and gular scutes. The mesoplastron is narrowed at the inner end, as in some species of *Baëna*. Each is traversed by the pectoro-abdominal sulcus.

The bridge is 30 mm. wide, fore and aft. The inframarginal scutes which covered the bridge cannot be mapped with certainty, but there can be little doubt that they were present and much like those of *Baëna*.

This genus is certainly closely related to *Baëna*, and it may be questioned whether it would not be better to refer the species to this genus. Most of the characters given under the definition of the genus are hardly of generic value; but considering the many minor differences between the species and those of *Baëna*, and the length of the period intervening between the Morrison epoch and the Belly River and Laramie epochs in which the earliest species of *Baëna* are found, it seems probable that a complete skeleton would afford more satisfactory generic characters.

It seems at least very certain that *P. sculpta* is to be regarded as a form ancestral to the later numerous species of *Baëna* which have been found in Belly River, Upper Laramie, Puerco, Bridger and Uinta beds. Dr. Baur regarded *Compsemys plicatulus* as the forerunner of *Baëna* (*Proc. Acad. Nat. Sci., Phila.*, 1891, p. 421); but we now find in the same quarry from which *C. plicatulus* has been reported a form much nearer to *Baëna* than is *Compsemys*. It becomes evident that we must go back much further to find the common ancestor of *Compsemys* and *Probaëna*.

Platycheilus, of the Upper Jurassic of Solothurn, Switzerland, is evidently very closely related to *Baëna* and *Probaëna*, and has been very properly assigned by Lydekker to the Pleurosternidæ. It differs in having a more highly sculptured carapace, supramarginal scutes, and mesoplastrals which do not reach to the midline.

In his Bibliography and Catalogue of the Fossil Vertebrata of North America, p. 437, the present writer has adopted for this family the name Pleurosternidæ, having overlooked the fact that Cope employed the name Baënidæ as far back as the year 1873 (6th Ann. Report U. S. Geol. Surv. Terrs., p. 621). The writer is not aware that the name Pleurosternidæ has had an earlier use.

EXPLANATION OF PLATE.

FIG. 1. View of the carapace showing some of the vertebral and costal scutes and the sculpture.

FIG. 2. View of the plastron. The light lines indicate the sutures, the dark lines the boundaries between the scutes.

In both figures the anterior end of the shell is toward the left hand.

FIG. 1.

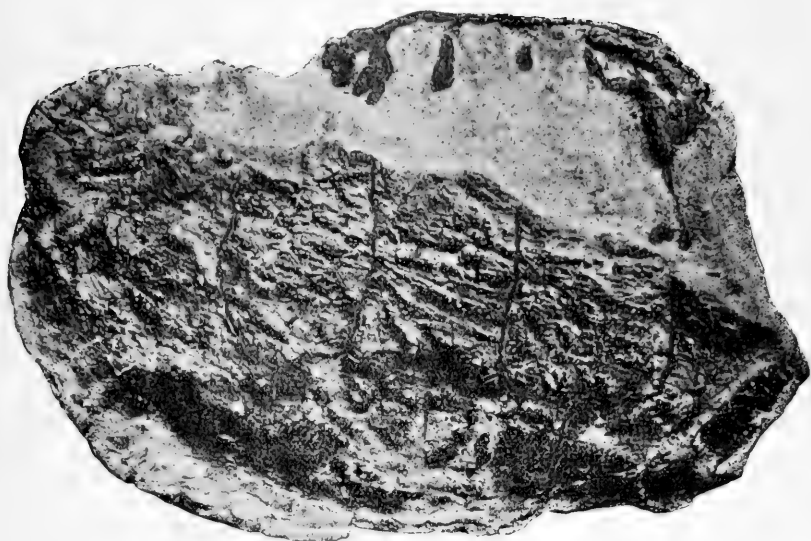
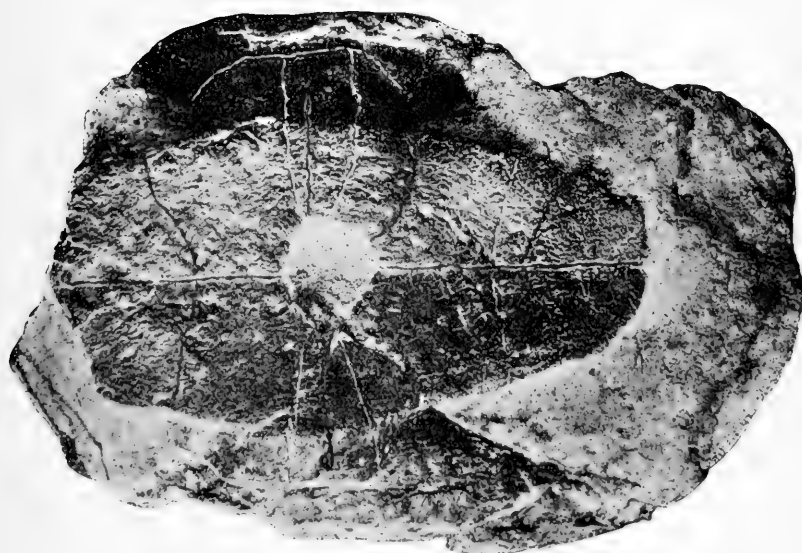


FIG. 2.



Probaëna sculpta Hay (No. 917).

VII. MINUTE BOOK OF VIRGINIA COURT HELD
FOR YOHOGANIA COUNTY, FIRST AT AUGUSTA
TOWN (NOW WASHINGTON, PA.), AND AFTER-
WARDS ON THE ANDREW HEATH FARM
NEAR WEST ELIZABETH; 1776-1780.¹

EDITED BY BOYD CRUMRINE, OF WASHINGTON, PA.

INTRODUCTORY.

It will have been observed that the organization of the Virginia court at Fort Dunmore (now Pittsburgh) for the District of West Augusta, was on February 21, 1775: Vol. I., p. 525, of these *Annals*; that the last sessions of that court were held at Augusta Town (or Catfish Camp, now Washington), on November 20, 1776: *Idem*, p. 568; that in the meantime the Monongahela Declaration of Independence had been promulgated at two points in the Monongahela Valley, on the same day, to wit, May 16, 1775, more than one year antedating the Declaration of Independence read to the assembled people from the southern front of the State House at Philadelphia, on July 4, 1776: *Idem*, p. 519; and that in October, 1776, the legislature of Virginia, now a sovereign state of the new American confederation, divided the District of West Augusta into three new counties, Ohio, Yohogania and Monongalia, all shown, with reasonable accuracy, as it is believed, on the map in Vol. I. of these *Annals*, facing p. 518.

The sessions of the court for Yohogania County were held first at Augusta Town (Catfish Camp, now Washington) from December 23, 1776, until August 25, 1777: these *Annals*, Vol. II., p. 91: and from the latter date until the Virginia jurisdiction was wholly ousted, on the farm of Andrew Heath (then in old Washington County), West of the Monongahela River, and near the present dividing line between Washington and Allegheny counties. A portion of the Order Book (usually called the Minute Book in our courts) of the Yohogania

¹ Continued from pp. 71-140, this volume.

County court has already been given, and the following is a continuation thereof.

WHAT WAS PENNSYLVANIA DOING ?

It has already been noted, perhaps, that a large amount of business of almost every nature and kind was transacted in these Virginia courts, and it would appear that a large majority of the inhabitants of the Monongahela Valley submitted their persons and property to the laws and courts of Virginia ; indeed, it is undoubted that many landholders under Pennsylvania titles, and perhaps Pennsylvania sympathy, were suitors in these courts. Why was this ? Doubtless it was because, the Revolution being on, and other causes existing, the power of the laws of Pennsylvania was not strongly felt west of the Allegheny Mountains.

Note the following facts :

Bedford County, the seventh Pennsylvania county established, was formed from Cumberland County, on March 9, 1771, and extended "Westward to the Western Boundaries of the Province," which boundaries, however, were not defined. The first term of court for that county was held at Bedford, about a hundred miles east of Pittsburgh, on April 16, 1771, and George Wilson, Esq., living near the mouth of George's Creek in what is now southern Fayette County, was of the justices, as were also Colonel (then Captain) William Crawford, living on the Youghiogheny River nearly opposite what is now Connellsville, Fayette County, Thomas Gist, son of Christopher Gist, settled near Mount Braddock in the same county, and Dorsey Pentecost, then living on his "plantation" called "Greenaway" in the "Forks of the Yough" settlement.

Now, Westmoreland County, Pennsylvania, was formed on January 26, 1773, from Bedford County, and embraced all the lands west of "the Laurel Hill," to "the limits of the Province." Old Westmoreland was thus organized two years before the Virginia Court at Fort Dunmore, and its first Court of Quarter Sessions, then the principal court of every county, was held at Hanna's Town, about three miles northeast of what is now Greensburg, on April 6, 1773. This Court of Quarter Sessions was the first court of justice ever held by English-speaking people west of the Allegheny Mountains, and it was held "Before William Crawford, Esq., and his associate Justices."

On January 25, 1775, about one month before the organization of

the Virginia court at Fort Dunmore, the following entry was made upon the minutes of the Supreme Executive Council :

“At a Council held at Philadelphia, 25th January, 1775, . . . Captain St. Clair appearing at the Board and representing that William Crawford, Esquire, President of the Court in Westmoreland County, hath lately joined with the Government of Virginia in opposing the jurisdiction of Pennsylvania in the County, the Board advised the Governor to supersede him in his office as Justice of the Peace and common Pleas. A Supersedeas was accordingly ordered to be issued :”
X. Col. Records, 228.

Others of the Justices of the Westmoreland County court were Arthur St. Clair, afterward a Major-general in the Revolution ; Thomas Gist, above mentioned, Alexander McKee, afterwards with Simon Girty and Matthew Elliot, a deserter to the British Indians ; Robert Hanna, William Louchry, George Wilson, above mentioned, Eneas McKay, Joseph Spear, Alexander McClean and James Caveat.

The early courts of Westmoreland County appear by their records to have been regularly held from April 6, 1773, to the second Tuesday of April, 1776. Observe that this last date was but a short time before the meeting of the Provincial Conference at Carpenter’s Hall, Philadelphia, resulting in the great Declaration of Independence by the American colonies. At this session there were orders made relating to township lines, roads, and recognizances in criminal cases ; and then there was an interregnum, and there are no records of any court held for Westmoreland County afterward until January 6, 1778. But the court for Yohogania County continued right along in a varied and extensive business, as will appear from the transcript of its records now publishing.

THE NATURE OF THE BUSINESS TRANSACTED.

It would seem that the transactions of these Virginia Courts were not confined to merely business matters. Witness the fact that at the session of the Yohogania County court held on September 22, 1777, “William Taylor produced a Licence appointing him to preach the Gospel after the Manner of his Sect ; which being read, the said William Taylor came [—into Court and took the Oath of fidelity and Allegiance to this Commonwealth :” *Annals*, Vol. II., p. 102. Who was this William Taylor, and what was his “Sect” ? And note that at the session of the same Court held on March 24, 1778, “John

Whitaker, a minister of the Gospel, came into Court and took the Oath of Allegiance and fidelity, as directed by an act of General Assembly, intituled an Act to Oblige the free male inhabitants of this State, above a certain Age, to give Assurance of Allegiance to the same and for other purposes: " These *Annals*, Vol. II., p. 129. Was this the eccentric Deacon Whiteacre who once prayed publicly to God, before his Methodist congregation, that he might be supplied with a new horse and soon received one?

Attention is called also to the records made in relation to the care of the families of soldiers from the Monongahela Valley in the War of the Revolution. These records are frequent but exasperatingly brief.

Our Pennsylvania histories show that at least two Pennsylvania regiments, fully organized, marched eastward to take part in the battles of the Revolution, but the records now published disclose that at least three regiments, organized as Virginia Voluntaries, the 5th, 12th and 13th Regiments, were composed more or less of men living in the Valley of the Monongahela. Verily the Revolutionary history of that valley is as yet unwritten.

The Early Currency.

We find in these records that the currency of the early days was in Pounds, Shillings, and Pence. And it will be noted that in the early causes in these courts, a recognizance of bail for an appearance at court was required in say £25, or in £100; while in 1780, at the end of the existence of this court in Pennsylvania, some such recognizances were in £5,000 or more, amounting, as we would now translate the English £, to about \$25,000. Wherefore, an explanatory note on this early currency and its depreciation may not be out of place.

Before and during the Articles of Confederation of 1776, and until the adoption of the Constitution of the United States in 1787, there was no supreme national authority, and therefore no national currency based upon a recognized unit. In every State there were at least two units of value, the State pound and the Spanish milled dollar. Our people having been under the English government adopted the English pound, shilling, and penny, as the *name* of its currency or money of account, yet the trade with the Spanish colonies in America and the West Indies brought into the country as its only coined money the Spanish dollar and its subdivisions. Thus the Dollar of the early day was not the "Dollar of our Daddies," but the "Spanish Milled Dollar."

But each state in the thirteen composing the confederacy had its own pound. In Georgia, the pound in silver contained 1547 grains; in Virginia, Massachusetts, Rhode Island, Connecticut and New Hampshire, 1289 grains; in New Jersey, Delaware, Pennsylvania and Maryland, $1031\frac{1}{4}$ grains, while in New York and North Carolina it reached the minimum of 996 grains. These State pounds, and their divisions into shillings and pence, had no actual existence; they were used only in keeping accounts, but when debts were to be paid and received they were turned into dollars and their divisions, halves, quarters, eighths, and sixteenths, each represented by a silver coin. Thus it was that in New England and Virginia, six shillings, or seventy-two pence, made a dollar; in New York and North Carolina eight shillings, or ninety-six pence; in New Jersey, Pennsylvania, Delaware and Maryland, seven shillings and six pence, or ninety pence, and in South Carolina and Georgia four shillings and eight pence, or fifty-six pence. And hence, though accounts were kept in pounds, shillings, and pence in all the states, yet to pay or receive a debt in the coin dollars in circulation, eight shillings were required in New York, for instance, six shillings in Virginia and seven shillings and six pence in Pennsylvania. See McMaster's "History of the People of the U. S.," Vol. I., p. 23.

Observe: If 7s. 6d. in Pennsylvania currency made one dollar (Spanish) then 20 shillings (or one pound) would be worth \$2.66 $\frac{2}{3}$, a little more than one half the English pound sterling. And if six shillings in Virginia currency made a dollar, then the Virginia pound was worth \$3.33.

"Fifty years ago the silver pieces which passed from hand to hand under the name of small change was largely made up of foreign coins. They had been in circulation long before the War for Independence, had seen much service and were none the better for the wear and tear they had sustained. The two commonest were the eighth and the sixteenth of the Spanish milled dollar, and these, taking the country through, passed under seven names. In New York and North Carolina, where eight shillings made a dollar, the eighth was a shilling (twelve pence), and went by that name. From New Jersey to Maryland (including Pennsylvania) the same coin was nearly equaled by eleven pence, and was there called the eleven-penny bit, or the levy, but became for a like reason nine pence in New England. In the same way the sixteenth of a dollar was called six-pence in New York;

five-penny bit or the fip in Pennsylvania, and four-pence in New England (and Virginia): McMaster's History, Vol. I., p. 189.

Now, as to the depreciation of this early currency :

It will be remembered, as already stated, that prior to the adoption of the Constitution of the United States in 1787, no paper money or currency was issued either by the United Colonies, or by any of the colonies separately, payable in their own coin, for they had none. True, the confederacy, and as well some of the colonies or separate states, perhaps, sometimes issued notes or bills of credit payable in "dollars" or parts thereof, but the coin meant was the Spanish coin. Usually, however, notes and bonds were issued payable in pounds, shillings, and pence, but, there being no pounds, shillings, and pence existing in coin, when debts were to be paid in coin the pounds, etc., were turned into dollars and their subdivisions, and all accounts were kept in pounds, shillings, and pence. Hence, the constant issue by the United Colonies during the War of the Revolution of paper money irredeemable according to its terms, resulted in an immense depreciation, which was one of the greatest sources of evil to the young nation.

The extent and the causes of this depreciation of the currency during the Revolution is best shown by the paper of Albert Gallatin on "The Currency and Banking System of the United States," first published in 1831, and contained in "The Writings of Albert Gallatin," edited by Henry Adams, Vol. III., p. 260, as follows :

"The paper money issued by Congress during the war of the American independence experienced no sensible depreciation before the year 1776, and so long as the amount did not exceed nine millions of dollars. A paper currency equal in value to that sum in gold or silver could therefore be sustained so long as confidence was preserved. The issues were gradually increased during the ensuing years, and in April, 1778, amounted to thirty millions. A depreciation was the natural consequence ; but had the value of the paper depended solely on its amount, the whole quantity in circulation would have still been equal in value to nine millions, and the depreciation should not have been more than $3\frac{1}{3}$ to 1 ; instead of which it was then at the rate of six dollars in paper for one silver dollar, and the whole amount of the paper in circulation was worth only five millions in silver. It is obvious that the difference was due to lessened confidence. The capture of Burgoyne's army was followed by the alliance with France, and her becoming a party to the war against England. The result of the war

was no longer considered as doubtful, and sanguine expectations were formed of its speedy termination. The paper accordingly rose in value; and in June, 1778, although the issues had been increased to more than forty-five millions, the depreciation was at the rate of only four to one. From the end of April of that year to the month of February, 1779, although the issues had been increased from thirty-five to one hundred and fifteen millions, the average value in silver of the whole amount of paper in circulation exceeded ten millions, and it was at one time nearly thirteen millions, or considerably more than that which could be sustained at the outset of the hostilities. But when it was discovered that the war would be of longer continuance, confidence in the redemption of a paper money, daily increasing in amount, was again suddenly lessened. The depreciation increased from the rate of 6 to that of 30 to 1 in nine months. The average value in silver of the whole amount of paper in circulation from April to September, 1779, was about six millions, and it sunk below five during the end of the year. The total amount of the paper was at that time two hundred millions; and although no further issues took place, and a portion was absorbed by the loan offices and by taxes, the depreciation still increased, and was at the end of the year 1780 at the rate of 80 dollars in paper to 1 in silver. The value in silver of the paper currency was then less than two millions and a half of dollars; and when Congress, in March following, acknowledged the depreciation, and offered to exchange the old for new paper at the rate of 40 for 1, the old sunk in one day to nothing, and the new shared the same fate."

These observations will explain many entries in the records now following that would otherwise be somewhat unintelligible:

VOLUME II. OF THE RECORDS.

(1) At a Court Continued and held for Yohogania County, April 27th, 1778.

Present: William Crawford, John Stephenson, Joshua Wright & Isaac Cox, Gentlemen Justices present.

View of the road from the Court House to Pentecost's Mills on Churteers Creek returned by the Viewers and Ordered to be confirmed, Running from said Court House to Spencer's point, Thence near Richardson's School House, Thence through Gabriel Coxes Lane, Thence crossing Peters Creek near to

John Coxe's — Benjamin Colling's, Thence to Joshua Wright's, Thence to William Stephenson's, Thence to Thomas Cooks, Thence to said mills. Ordered that Gabriel Cox be appointed Overseer of the Road from the Court House to Peters Creek near John Coxe's, James Wright Overseer of the Road from Peters Creek near John Coxes to opposite Henry Johnstons, and Nathaniel Blackmore Overseer of the road from Henry Johnstons to Pentecosts Mills on Churteers Creek and that the Tithables within three miles of said road (except on the East Side of the Monaungohela River) work on Cut open and keep said road in repair.

John McDowell and John Cannon Gentlemen Justices Present.

Upon the Complaint of Cornelias Crow an Indented Servant that John Harry his Late Master lately told said Servant that he had Sold him to a Certain Thomas Cuninghame to be forced into the Armies of the United States as a Soldier, and that he has for some Time and doth at this Time suffer for Necessary Cloathing, and upon the view of the Court the Complaint respecting the Cloathing is justly founded.

Ordered that the sd Cornelias Crow be and remain a Servant, and that the said John Harry or Thomas Cunningham that claims property in said Servant be and appear before the next Court held for this County to Answer the Complaint or said Cornelias Crow.

- (2) Robert McGlaughlin and James McLean produced commissions from his Excellency the Governor appointing them Lieutenants of the Militia which being read, the said Robert and James came into Court and swore into said Office.

Ordered that this Court be adjourned untill Tomorrow Morning 8 O Clock.

W. CRAWFORD.

April 28th Court met according to adjournment.

Present, Isaac Cox, John Cannon, William Goe, Andrew Swearengen, John McDowell, and George McCarmick, Gentlemen Justices, Present.

Andrew Swearengen and David Andrew produced Commissions from his Excellency the Governor appointing Them Captains of the Militia, which being read, the said David and Andrew came into Court and Swore into said Commissions.

Nathaniel Blackmore came into Court produced a Commission appointing him a Lieutenant of the Militia, which was read and Sworn to accordingly.

[Bill of sale from John Stueart to Jacob Bouseman for Three Hundred Acres.]¹

Power of Attorney John Stueart to Jacob Bouseman be as proved by the Oath of John McCollister, one of the Subscribing Witnesses.

Mortgage John Stueart to Jacob Bouseman for Three Hundred Acres of Land on Yohogania River was proved by the Oath of Jacob Leoport, one of the Subscribing Witnesses.

(3) Upon the motion of Jacob Bouseman ordered that his Mark Two Crops and Two Slits be recorded.

Thomas Gist came into Court and being Sworn on the Holy evangelist of Almighty God, Sayeth that in the year of our Lord one Thousand Seven Hundred and Seventy two, in the month of April to the best of his recollection, in the presence of Joseph Beeler, John Stephenson and Edward Rice, he Solemnized the wrights of Matromony between Isaac Meason and Catherine Harrison, according to the rights and ceremonies of the Church of England, he the s^d Seponent then being a Majistrate in the State of Pennsylvania, and that he was under an Oath not to Devulge said marriage Except Legally called for that purpose.

John Stephenson and Joseph Beeler came into Court and being Sworn on the Holy Evangelist of Almighty God, Sayeth that they ware present at the Marriage of Isaac Meason with Catherine Harrison in the year one Thousand Seven Hundred and Seventy two in the Month of April to the best of their recollection, and was under a promise not to devulge the said Marriage Unless Legally called, or Death of either of the parties, and the said Joseph farther Sayeth that there was a preëngagement between the said Isaac and Catherine that upon the devulging the said Marriage contrary to the will of the sd Isaac then that said parties should be absolved from any obligation to each other as man and wife.

Indenture from Martha Daviss to Isaac Cox acknowledged by said Martha and ordered to be Recorded.

¹ The part in brackets erased in the original.

Bargain and Sale Thomas Bay to James Marshall for four Hundred Acres of Land acknowledged by said Bay and Ordered to be Recorded.

Bargain and Sale Thomas Bay to George Marken [or Marten, *Editor*] for Two Hundred Acres of Land acknowledged by said Bay and Ordered to be recorded.

- (4) Bargain and Sale Ezekiel Johnston to Joseph Beeler Jun^r proved by the oath of Dorsey Pentecost and Joseph Beeler Sen^r two of the Subscribing Witnesses.

Joseph Beeler produced to this Court a Commission from his Excellency the Governour appointing him Colonel of the Militia was red & Sworn to in open Court.

Nathan Ellis produced to this Court a Commission from his Excellency the Governour appointing him Captain of the Militia which was red & Sworn to in open Court.

W^m. Harrison took the oath of Major of the Militia in open Court.

Richard Crooks took the oath of Lieutenant of the Militia in open Court.

Michael Tigert took the oath of Ensign of the Militia in open Court.

Ordered that Sarah Shirly be admitted to administer on the estate of James Shirly Deceased, she Complying with the Law, Whereupon the sd. Sarah came into Court with her Securities & entered into Bond accordingly.

Ordered that Ignatius Lebat Sam'l Sample Sam'l Evalt & David Dunkin or any three of them Being first sworn do appraise the s^d. Estate & make Report to next Court.

James Gray Enters himself special Bail in a suit wherein Jno. Pearce is plaintiff & Jno. Raredon Defendant.

Jno. Raredon Enters himself special Bail in Case wherein W^m. Danning is plaintiff & and James Gray Defendant.

Ordered that Mary Lindsey the wife of William Lindsey a poor Soldier in the Continental service be allowed Six pounds per month for the support of herself and Six children to commence the first day of January Last.

Ordered that Eloner Lindsey the wife of Ezekial Lindsey be allowed the sum of five pounds pr. month for the support of herself and five children.

- (5) Ordered that Jane Dunn the wife of Thomas Dunn a poor Soldier in the Continental Service be allowed the sum of four pounds pr month for the support of herself and four children.

Ordered that two children of Peter McCorkeys a soldier in the Continental Service be allowed the sum of two pounds pr month for their Subsistence.

Ordered that Elizabeth Depugh the wife of John Depugh be allowed the sum of three pounds pr Month for the support of herself and Three Children.

Ordered that the wife of Jeremiah McCarty be allowed the sum of three pounds pr Month for the support of herself and three children.

Ordered that the wife of William Nau a poor Soldier who died in the Continental Service be allowed the sum of six pounds pr month for herself and Six children to commence the first day of January until his Death.

Ordered that the wife of James Behan be allowed the sum of three pounds pr month for the support of herself and three children.

Ordered that the sum of two pounds pr month be allowed the wife of Richard Wade for the support of herself and two children to Commence the first day of this month.

Ordered that the wife of David Smith be allowed the Sum of three pounds for the support of herself and three children.

Ordered that Susannah Decompt and Christopher Hayes be appointed Administrator and Administratrix of the Estate of John Decomp Deceased they complying with the Law. Whereupon the said Susannah and Christopher came into Court and Entered into Bond oath accordingly.

Ordered that Joseph Beeler, James Blackstone, Edward Cook, and Benjamin Davis or any three of them they being first sworn do appraise the Estate of John Decomp Deceased and make return to next Court.

- (6) Daniel Brooks is appointed Administrator of the Estate of Nathan Hammond Deceased he complying with the Law, Whereupon the said Daniel came into court entered into Bond and oath accordingly. Ordered that Joseph Parkerson, Thomas Parkerson, James Innis & David Richie any three of them

they being first sworn do appraise the Estate of Nathan Hammon Deceased and make return to next Court.

Ordered that Isaac Cox be appointed Administrator of the Estate of Samuel Richardson deceased he complying with the Law, whereupon the said Isaac came into Court and intered into Bond and oath accordingly. Ordered that Abraham Vannatree, Edmund Pollack, Richard Elson and Edward Wiggins or any three of them they being first sworn do appraise the Estate of Samuel Richardson, Deceased and make return to next Court.

Bargain and Sale John Pearce to James Patterson for three Hundred and Eighteen Acres of Land Acknowledged by the said Pearce and Ordered to be Recorded.

Ordered that George McCarmeck John Cannon & John Stephenson Gent. be recommended to his Excellency the Governor as proper persons to serve as Sheriff for this County, the Ensuing year.

Ordered that an Attachment Issue against Philip Whitsel and the papers and records belonging to the District of West Augusta, which by Act of Assembly are to be Inyrolld amongst the Records of this County, and the said records so attached have before this Court for farther Proceedings.

Bargain and Sale Matthew Rogers to John White for an Improvement of Land on Churteers Creek Acknowledged by said Rogers and Ordered to be Recorded.

(8)¹ Ordered that Court be adjourned Until Tomorrow Morning 8 oClock.
JOHN CANON.

Court met according to adjournment April 29th, 1778.

Present William Goe, Isaac Cox, Andrew Swearengen & Joshua Wright Gentlemen Present.

George McCarmick ² is appointed Sheriff Protempore to serve one month he complying with the Law. Whereupon the said George with Samuel Beeler and Dorsey Pentecost his Securities come into Court entered into Bond and oath accordingly.

Ordered that Benjamin Collins have Leave to keep a publick Ordinary at his Dwiling House he complying with the Law.

¹ Paging of original followed, though erroneous.

² This name erased in the original.

Whereupon the said Benjamin came into Court entered in Bond accordingly.

Appraisement of the Estate of Job. Robins returned by the Appraisers and ordered to be recorded.

Benjamin Custard and John Wall Enter Special Bail for Michael Humble and John Johnston at the suit of Mary Burriss.

Upon the motion of John Wall ordered that his Mark a Crop in the right Ear and a hole in the Left be recorded.

Upon the motion of George McCarmick his mark a Crop in the right Ear and half Crop in the Left ordered to be recorded.

Upon the Motion of Benjamin Custard his mark a Cropt and slit in the right Ear and a Slit in the Left Ordered to be recorded.

The Ear mark of Thomas Cherry a crop in the right Ear ordered to be recorded.

(9) Samuel Newell, Gentleman Present.

Samuel Beeler being bound in recognizance and charged with Hogstealing which being called personally appeared and pleads not guilty. Ordered to be continued at Defendant's Request.

Benjamin Jones vs. Patrick McDonald. Plu. Cap.

Paulser Shilling vs. Spencer Collins. Tresp. Plu. Cap.

Ordered that a Dedimus Issue to Take the Examination Anne Taylor and Margaret Conner, a witness In behalf of Joseph Cox against John Williams, Theodorus Davis, and Mary Hazle.

Dorsey Pentecost vs Christopher McDonald In. Cas. Contd.

Zachariah Connell vs Abraham Vaughan In Debt. Plu. Cap.

David Wilson vs Henry Bowling In Debt. Plu. Cap.

John Livy vs Samuel Beeler I. Tresp. P. Cap.

John Gallehar vs Christian Summet In Slan. P. Cap.

Hugh Sterling came into Court and Took the Oath of a Deputy Sheriff.

Joseph Lindsey against George Long In Debt Plu Cap.

Richard Swissichs agt. Jacob Jones In Case. Plu. Cap.

Paul Froman against Robert McCrowry In Debt Plu Cap.

Francis Morrison agt. Daniel Swigert In Debt Plu. Cap.

George Schley against John Rammage In Case Plu. Cap.

Susannah Schley against Robert McKendley In Case Plu. Cap.

Thomas Freeman agt. John Jones and Samuel Lyneet In Case Plu Cap.

Jacob Bouseman agt. James Bradley In Case Plu. Cap.

Mary Burriss agt Michael Humble & John Johnston In Case Sp. B.

Jacob Johnston against Godfrey Waggonier In Case Plu. Cap.

Jacob Shillings against Henry Newkirk In Case Plu. Cap.

The Same against the same In Debt. Plu Cap.

William Dunnanghgain against James Gray In Debt Sp. Bail.

Paul Froman against John Dean In Case Plu. Cap.

Thomas Cook against Richard Dickerson In Case. Plu Cap.

John Pearce Sen. against Aron Carter In Case Al. Cap.

Thomas Wells against Paulcer Shillings In Case A Cap.

(10) James Murphy

against In Case

Jacob Jones Then came the parties and then also came a Jury To wit. James Wright, John Wall, Benjamin Custard, Benjamin Collings, Robert Craighead, David McKee, Enoch Springer, Michael Humble, Matthew Rogers, Joseph Cox, Patrick Jourden & John Johnston, who find for the plaintiff L 16. 15 6. & Costs.

David McClure

against In Debt.

Patrick McElroy, Assine. Upon the motion of the Plaintiff Judgmt was Confesed by the Difind in a letter to the clerk. It is Considered by the Court That the plaintiff recover against the Defendant upon Bond Eighty pounds with Interest from the Sixth day of April 1777, untill paid and his Costs.

John Brown against John Crow. In Asst. Dismd. at Plaintiffs Request.

John Pearce Senr. against John Reredon. Slep. Bail.

Joseph Pearce against Arnold Evins Al Cap.

Andrew Swearingen

against In Case

Robert Hamelton Ordered to be Dismissed at Plaintiff's request, Defendant paying Costs.

Andrew Steel against Joeseeph Ralston. In Case Al Cap.

William Braden against James Vannatree In Case Al Cap.

Obidiah Stout against Thomas Thompson and wife In Slan. Al Cap.

Richard McMahan against James Bruce In Case Agreed.

William Thompson against John Fife Sen. In Asst. Plu Cap.

Cloe Riggs against Ebenezer Corn In Case Al Cap.

Moses Thompson agt William Carpenter In Debt. Al Cap.

Dorsey Pentecost against Jacob Long In Debt Al Cap.

William Brashers against Robert Hamelton In Case Al Cap.

(11) John Nelson against Jacob Shilling In Case C. O.

John White against Ezekil Johnston In Case Al Cap.

William Bruce against Archibald Frome In Case. C. O.

John Springer against Henry Kearsey In Asst. Al Cap.

Nicholas Dawson against Francis Kirkpatrick In Sl. Al Cap.

William Thompson agt. John Fife Sen. In Tresp. Al Cap.

John Campbell agt William Patterson. In Trespass C. O.

Jacob Shillings vs John Wilson In Trespass C. O.

William How vs. William Genoway; Ebenezer Corn & George Corn Jun. In Trespass Al Cap.

Paul Froman vs James Boyers In Tresp. Al. Cap.

Michael Myors vs Philip Hooper In Trespass. Al Cap.

John Mitchel vs. Philip Hooper. In Case. Al Cap.

Mordeca Richards vs Joseph Ross In Slan. Al Cap.

John Springer vs. James Dunnaughan In Trespass. Al Cap.

John Crow vs John Brown In Slr. agreed.

Joseph Baker vs John Springer In Debt Al Cap.

Daniel Byers vs James Patterson In Case C. O.

Benjamin Fullum vs William Johnston, John McCornish. In Asst. Al Cap.

Benjamin Fullum vs William Johnston & John McCornish. In Case. Al Cap.

David Andrew vs W^m. Johnston In Tresp. Al Cap.

James Johnston agt. Godfrey Waggoner In Case Al Cap.

Jacob Shilling vs Samuel Fortner In Tresp. Al Cap.

Mary Burriss vs David Williams In Case. Al Cap.

Upon the Motion of Andrew Sweargen ordered that his Ear Mar a Crop in the Left Ear and a hole in the Right be recorded.

Upon the Motion of Thomas Hamelton ordered that his Ear mark a Crop slit and a bit in the right Ear be recorded.

Upon the motion of Joshua Wright ordered that his Mark a Swolefork in the Left Ear be Recorded.

- (12) Ordered that Isaac Cox Gentleman contract with some Proper Person or Persons to build a pair of Stocks, whipping Post and pillory, in the Court house yard, and also a compleat Bar, and other work in the Inside of the Court House as he may thing proper for the conveniency of the Court and Bar, the whole to be compleat by next Court.

George McCarmick Gentleman high Sheriff Protest against the Strength & sufficiency of the Goal.

Ordered that the Sheriff summon a Grand Jury to attend the next Court.

Ordered that William Price, Thomas Rogers, and Isaac Wells be appointed Constables to serve the ensuing year, and that they be Summoned to attend the next Court to Qualify into said Office.

Isaac Cox having obtained an Atteachment against the Estate of Samuel McCored Thomas Apple garnishee being sworn sayeth that he hath about five acres of winter grain and no more of the Estate of the sd. Samuel in his hands. and the said Samuel being called and failing to appear and replevy the said atteached effects though Solemnly called, the Plaintiff produced his acct. of five pounds, Ten Shillings and four pence & swore to the Justness thereof. Judgment for the afores^d. sum of five pounds Ten shillings, and four pence, with Costs Ordered that the Sheriff make Sale of the Atteached Effects.

Ordered that Court be adjourned to Court in Course.

WILLIAM GOE.

- (13) At a Court continued and held for Yohogania County May the 25th. 1778.

Present George Vallandingham, John McDonald, Samuel Newell, Benjamin Kirkendall, Gentlemen Justices.

Upon the Motion of William Brur Ordered that his Ear mark a Crop in the near Ear, and under bit in the off Ear be recorded.

Bargain and Sale Ezekil Johnston to Joseph Beeler Jun. was proved by the oath of Joseph Beckett one of the subscribing witnesses, and ordered to be recorded as Dorsey Pentecos

and Joseph Beeler Sen., at a former Court was Sworn to the Execution of said Bargain and Sale and Subscribing Witnesses Thereto.

Administration of the Estate of Conrad Swessicks deceased is granted to Margaret Swessicks She having Complied with the Law.

Andrew Pearce and Sarah Pearce took the oath of Executrix & Ex^{or} of the Estate of James Pearce Deceased, and complied with the Law.

Ordered that Zadock Wright, W^m. Brice, Gabriel Cox and William Frye or any three of them they being first Sworn do appraise the goods chattles and credits and Slaves if any of the Estate of Conrad Swessicks deceased and make return to next Court.

Administration of the Estate of Benjamin Bruer deceased is granted to Mary Bruer she having complied with the Law.

(14) Ordered that Joseph Beeler Sen, Christopher Hays John Mellender & John Morecroft or any three of them they being first sworn do appraise the goods chattles Credits and slaves if any of the Estate of Benjamin Brewer deceased and make return to next Court.

Benjamin Frye Gentleman Present.

Administration of the Estate of Jonathan Higgs deceased is granted to Catharine Higgs she having complied with the Law. Ordered that Joseph Beeler Sen. Christopher Hays John Millinger and John Morecroft or any three of them they being first Sworn, do appraise the Estate of Jonathan Higgs deceased and make return to next Court.

Mesheck Carter enters Special Bail for Daniel Williams at the suit of Isaac Vance.

Bargain and Sale James Patterson to John Strauthers for Six Hundred acres of Land acknowledged by the said Patterson and Ordered to be recorded.

Hugh Brawday enters Special Bail for Jas. Boyer at the Suit of Paul Froman.

Elijah Hart Took the oath of Lieutenant of the Militia for this County in open Court.

Elijah Hart and Walter Sparks came into Court and took the oath of Allegiance and Fidelity.

Administration of the Estate of Archibald McNeal deceased is granted to William Filds, he having complied with the Law. Ordered that Thos. Applegate William Crow, Andrew Pearce and Walter Wall or any three of them they being first Sworn do appraise the Estate of Archibald McNeal deceased and make return to next Court.

(15) Benjamin Jones v Patrick McDonald. Plu Cap.

Zacheriah Connell v Samuel Wells. Contd.

v Providence Maunce. Contd

John Worshington v Michael Morton. Eject, Contd.

Edward Ward v Richard Dunn. Contd.

v Joseph Wells Contd

Walter Briscoe v Edward Todd Contd.

Zachariah Connell v John Lindsey Contd.

Peter Reasoner v Davis Ruth Contd.

John Springer Plaintiff

v

Upon motion of the parties

Henry Kearsey Defendt. ordered to be refered to John Hull, Henry Taylor & George Vallandingham.

Valentine Shuster enters Special Bail for John Eliott at the suit of Philip Hooper.

William Collings enters Special Bail for Michael Myers at the suit of Philip Hooper.

William Collings enters Special Bail for George Myers at the suit of Philip Hoopr.

William Collings enters Special Bail for Michael Thomas and Zebuland Collings at the suit of Philip Hooper.

View of a Road from the House of Edward Cook Crossing the Monaungohela River at the House of John Ratton's, Thence to or Near the plantation of John Hop deceased, Thence to Luther Colvin's on Pigeon Creek, Thence the nearest and best way to the Road Leading from Parkersons to Zebuland Collings. Ordered to be Confirmed, and that the Tithables within three miles on each side work on and keep said Road in Repair.

John Decker, John Hull, Samuel Johnston, Jacob Johnston, Samuel Frye and Henry Newkirk came into Court and Took the oth of Feledity.

(16) Peter Reasoner is appointed Surveyor of the Road from Edward Cook's to John Rattons ferry.

Nicholas Christ is appointed Surveyor of the Road from John Rattons ferry to Pigeon Creek, near the House of Luther Colvins.

John Decker is appointed Surveyor of the road from Pigeon Creek near the House of Luther Colvins to the road Leading to Parkersons to Zebulon Collinings.

Then came a Grand Jury or Inquest of the Body of this County, vizt. John Decker, John White, Gabriel Cox, Jacob Bouseman, Henry Newkirk, Jacob Johnston, John Springer, Nicholas Christ, James Wright, Samuel Johnston, John Hull, Samuel Frye, David Andrew, Joseph Brown & James Patterson, who being Sworn received their Charge and Retired to their chamber.

(17) Bargain and Sale Jasper Cawther and Catherine his wife to David Andrew for a Tract of Land on the waters of Millers Run proved by the oath of Samuel McBride and James Scott the two Subscribing witnesses & Ordered to be Certified.

Edward Kemp enters Special Bail for Spencer Collings at the suit of Paulcer Shilling.

Joseph Beeler Jun. came into Court and Took the oath of Deputy Sheriff of this County.

Bargain and Sale William Wilson to Jeremiah Ellis for One Hundred and five Acres of Land. Acknowledged by said Willson and Ordered to be record.

John Riggs enters Special Bail for Nathan Ellis at the suit of Tacitus Gillord.

Henry Kearsey and James Munn enters Special Bail for William Johnston at the suits of Benjamin Fullum and David Andrews.

Henry Kearsey and James Munn enters Special Bail for Robert Johnston at the suit of Benjamin Fullum.

John Gutteridge produced a Commission from his Excellency the Governor appointing him Lieutenant of the Militia, which was read, and Sworn to accordingly.

License is granted to Joseph Nicholas to keep an Ordinary at his Dweling House in the Town of Pittsburgh the Ensuing year he having Complied with the Law.

William Christie enters Special Bail for Robert McKindley at the suit of Susannah Schley.

- (17) Upon the motion of Tobias Decker Ordered that his mark a Crop in the Left ear, and Swolofork in the right be recorded.

License is granted Richard McMahan to keep an Ordinary at his Dweling House in this County he having Complied with the Law.

George Christ produced a Commission from his Excellency the Governor appointing him Ensign of the Militia which was read as usual, & Sworn to, in Open Court.

Inventory of the Estate of Francis Brown deceased returned by the appraisers and ordered to be recorded.

Benjamin Vannatree enters Special Bail for James Vannatree at the Suit of William Braden.

Ordered that Isaac Cox and Benjamin Kirkendall, Gentlemen Bind Andrew Brooks an Orphan to Friend Cox, according to law.

Ordered that the Clerk draw on the Treasury of this Common Welth for the sum of Sixteen pounds for the support of Anne Jones the wife of Richd. Jones a poor Soldier in the Continental Service.

Ordered that Court be adjourned Untill Tomorrow Morning 7 OClock.

WILLIAM GOE.

- (20) Court met According to adjournment May 26, 1778.

A new Commission of the pice, and Commission of Oyor and Terminer, directed to, John Campbell, Edward Ward, Thomas Smallman, Dorsey Pentecost, John Gibson, William Crawford, John Stephenson, John Cannon, George Vallandingham, William Goe, John Neavill, Isaac Cox, John McDowell, Richard Yeates, John McDonald, George McCormick, Philip Ross, Benjamin Kirkendall, William Harrison, Samuel Newell, Thomas Brown, Thomas Freeman, John Decomp, Joshua Wright, Oliver Miller, Benjamin Frye, Matthew Richie, Jacob Haymaker, Andrew Swearingen, Benjamin Harrison, Zachariah Connell, Isaac Leet Senr. Joseph Beeler Senr. John Carmichael, James Rogers, Isaac Meason, James McLane, James Blackstone, Joseph Beckett and Joseph Vance, Gentlemen, which being read as usual, the said William Goe, Thomas Freeman, Andrew Swearengen, John McDonald, Benjamin Frye and George Vallandingham, Took the usual oaths of Justices of the Peace and Justices of Oyer and Terminer.

The Court being Constituted, Took their seats and proceeded to Business.

Anthony Dunleavery enters Special Bail for Joseph Ross at the suits of Mordaca Richard and Margaret Brownfield.

Tacitus Gillord Esquire came into Court and Produced a pasport from the Board of War and Disered that the same may be Entered on the minutes of this Court as a Testimoneal of his Allegience and Fidelity to the United States of America whi is granted and is as follows,

War Office York Town

October 15th 1777.

(21) Tacitus Gillard Esq. Late an Inhabitant of the State of South Carolina being on his way to Florida or some of the Countries or places on this side Thereof, or adjacent Thereto, where he proposes to form a Settlement, and having applied for a pasport to enable him to go and Travel through the parts of the Country, in allegience to and in Amity with the united States of America, and having produced Testimonials of his having Taken the Oaths of allegience and Fidelity, to the said States, These are to permitt the said Tacitus Gillard, Esqr. freely to pass with his famely, Servants, Attendance, and Effects Down the River Ohio, and all persons, are Desired not to molest the said Tacitus Gallord Esqr. his Family, servants and Effects on any account or pretense whatsoever.

By order of the Board of War.

RICHD. PETERS *Secy.*

To all Continental Officers and others whom it may Concern.

Richard McMahon enters Special Bail for Jacob Long, Junr. at the suit of Benjamin Caster.

License is granted Robert Henderson to keep an Ordinary at his Dwiling House he having complied with the Law.

Andrew Swearengnen Gentleman Absent.

Administration of the Estate of Joseph Brashers deceased is granted to William Brashers he having complied with the Law.

Ordered that Bazel Brown, Thomas Brow, Hugh Laughlin and John Laughlin, do appraise the Goods, Chattles, and Credits and Slaves if any of the Estate of Joseph Brashers Deceased.

Andrew Swearengen Gentleman Present.

- (22) Administration of the Estate of James Loudon deceased is granted to Robert Loudon he having complied with the Law. Ordered that Ralph Cherry, Edward Doyale, Edmond Lindsey and Isaac Meason or any Three of them they being first sworn do appraise the goods, chattles, credits and Slaves if any of the Estate of James Loudon deceased and make returns to next Court.

Isaac Cox and Benjamin Kirkendal Gentleman named in the Commission of the peace come into Court and Took the oaths of Justices, and Justices of Oyer and Terminer.

Edward Kemp produced a Commission appointing him Captain of the Militia, which was read and sworn to accordingly.

Upon the petition of David Philips and Others Ordered that John Jones, Robert Henderson, and John Wall they being first sworn do view a road from McKees ferry on the Monaungahela River to Pentecost's Mills on Churteers, and make report of the Conveniency and Inconveniency thereof to the Next Court.

Upon the Petition of David Philips Ordered that William Frye, Jacob Barrachman, and Jacob Shilty make a review of the road from Peters Creek to Robert Hendersons and make report of the conveniences and Inconveniences of the nearest and best way, to next Court.

Samuel Newell gentleman named in the Commission of the piece come into Court and Took the Oaths of Justices of the pece and Justices of Oyer and Terminer.

Resolved as a Rule that this Court will attend on the Business of this County and proceed to give Judgmt and Determine Causes, in the months of March, May, August and November, and that In the Intermediate Courts the Justices will hold Court for proving of Wills, deeds, &c. &c. &c.

- (23) Upon the motion of George Schley ordered that his Mark a Crop in the right Ear be recorded.

Naturalization of George Schley was read and on the motion of the said George Ordered to be recorded.

James Kirkindall enters Special Bail for Samuel Dunn at the suit of Samuel Holms.

Ordered that the Sheriff make sale of Cornelius Crow an In-

dedent Servant belonging to John Harry, and pay the money arising from such sale to the said Harry.

Upon the Petition of William Anderson Leave is granted him to keep a ferry from his own Land on the South Easterly side of the Monaungohela River to the Lands of Andrew Heath on the Opposite. And that the said Anderson shall receive Nine pence for Man and Horse, four pence half penny for every Head of neat Cattle, and the same for a foot person, furthermore to ferry over the Militia on publick Muster days at the rate of four dollars pr day.

Upon the motion of Godfrey Waggoner ordered that his ear mark a hole in the left ear & a slitt in the right be Recorded.

Jacob Feagly

v

in Case

Hugh Brawdy Then came the defendt. & pleads the general Issue. Then came a Jury viz. Joseph Skelton, William Taylor, Ezekiel Johnston, Friend Cox, David Phillips, Alexander Douglas, John Wall, George Long, Thos. Lapsy, Michael Humble, Saml. Dunn & John Cox, who sayeth that the Defendant hath not paid the Dett as in pleading he hath alleged. Judgment for £. 7 : 8 : 9 Int 7 S. 6 and Costs.

(24) Upon the Petition of Elizabeth McMahon against Peter Ebrod. It is considered by the Court that the Plaintiff recover against the Defendant three pounds and three pence with Interest from the 13th day of May 1763 untill paid.

Leave is granted Samuel Ewalt to keep an Ordinary at his Dweling House in the Town of Pittsburgh he having Complied with the Law.

The Deppotion of James Elliott and John Barr Taken before John Campbell Esq. upon the Motion of James Swolevan in behalf of David Dunkin. Ordered to be recorded.

Jacob Decker

v

Petition. Ordered to be Dismissed at

Joseph Hill Sen Plaintiffs Costs.

Upon the petition of Hugh Sterling against Anthony Dunleavey. It is considered by the Court that the Plaintiff Recover against the Defendant the sum of three pounds four shillings, and Costs.

Tacitus Gallard Plaintiff

v

In Trover

Nathan Ellis Defendt. Then come the parties and agreed to Leave their Controversy to the Judgment of the Justices Sitting, without the formality of a Jury. Whereupon Judgment is given the Plaintiff for One hundred and forty five Bushells of Corn and Costs, upon Tacitus Gilliard's demand of the Corn & Tender of a Coppy of this Judgment.

Bazil Brown

v

In Case Contd. premtory order. Rule

Robert Hamilon of Trial next Court.

(25) Alexander Sumral & Thomas Jock v Walter Sumral, Contd.

Upon the motion of Tacitus Gillard Ordered that the Sheriff summon John McCullum be Sommoned to attend this Court Tomorrow by two OClock after noon to prosecute his action against said Gillord.

William Marley produced to this Court a Commission from his Excellency the governour appointing him Ensign of the Militia which was read & swore to accordingly.

James Fasithe was Brought into Court and Stands Charged with Disaffection to the State, who pleads not Guilty, whereupon come the same Jury as before, who say that the sd. James Fasith shall pay a fine of Twenty dollars and Suffer forty Eight hours Confinement in the Common Goal, and before he be Discharged therefrom give such Security as the Court Shall think fit.

Edward Kemp enters Special Bail for Samuel Fortner at the suit of Jacob Shilling.

Jacob Johnston enters special Bail for Henry Newkirk at the suit of Jacob Shilling.

Upon the motion of Abraham Fry by Benjamin his son ordered that Abrahams ear mark an under Bit out of the under side of each ear be Recorded.

William Boshears produced to this Court a Commission from his Excellency the Governour appointing him Lieutenant of the Militia which was red and sworn to accordingly.

W^m. Downs enters Special Bail for Philip Hooper at the suit of Michael Myers.

W^m. Downs enters Special Bail for Philip Hooper at the suit of John Mitchell.

- (26) Benjamin Vinater enters Special Bail for Godfrey Waggoner at the suit of James Johnston.

Upon the Complaint of John Campbell Gentleman that Samuel St. Clair & Joseph Erwin have Intentionally raised Sedition & mutinous Disturbances in the militia. Ordered that the said Samuel and Joseph be held in five hundred pounds Bail each, with two sureties for each in the sum of Two hundred & fifty pounds each. Whereupon the said Samuel St. Clair Came into Court with John Gorley and Michael Humble his securities and did Acknowledge to ow to Patrick Henry Esq. Governor or Chief Majestrate of the Common Welth or his Successor in Office the sd. Samuel in five Hundred pounds, and the said Suretys in Two Hundred & Fifty pounds each, to be levied on their respective goods and Chattles Lands & Tenements, on the Condition that the said Samuel be of his Good Demeaner Towards all within this Common Wealth, and Towards all the Good Subjects of the same for one year and a Day. Joseph Irwin, with Thomas Lapsley and John Gorley his sureties enter into recognezonce as Aforesaid.

Thomas Lapsley and Robert Henderson produced Commissions from the Governor appointing them Lut's of the Militia which was read and Sworn to Accordingly.

Ordered that Court be adjourned untill Tomorrow Morning 7 oClock.

GEORGE VALLANDIGHAM.

- (27) May the 27th, 1778. Court met according to adjournm't.

President William Goe, George Vallandham Samuel Newell, John McDonald, Gentlemen, Present.

On the motion of Henry Taylor Ordered that his mark a Crop in the Left Ear and Two Slitts in the right ear be recorded.

Thomas Freeman Gentleman Present.

James Ravenscroft P.

v

Hog Stealing.

Samuel Beeler D.

Then came the parties and then came also a Jury, Towit : Joseph Shelton, Edward Kemp, Uriah Johnston, Ezekiel

Johnston, Alexander Duglass, Thomas Lapsley, George Long, William Marshall, Nathan Ellis, James Wright, Benjamin Collings, Benjamin Cox, which being Elected and Sworn Sayeth that the said Samuel is gelty. Ordered That the said Samuel be fined Ten pounds Current money, and four Hundred pounds of Tobacco. The Tob'o be paid to James Ravenscroft being Owner and Informer. Ordered that Thomas Moore be all'd five Days attendance as a witness in the above suit. John Hull the same, Charles Philis the Same.

- (28) Joshua Wright Gentleman named in the Commission of the peace and Commission of Oyer and Terminer came into Court and took the oaths of Justice of the piece, and Justices of Oyer and Terminer.

David Philips v Joseph Killpatrick, Thomas Miller and Alexander Miller. Ordered to be Dismissed at Plaintiffs Request.

Joseph Killpatrick v David Philips ordered to be dismissed at Plaintiffs request and Costs.

The Grand Jury having found a Bill against James McGoldreck for puling down a Block House belonging to the Town of Pittsburg, the said James being Called plead not guilty, then come the said Jury as before, and being Elected & Sworn sayeth that the said James is Gilty. Ordered, be fined Ten pounds Curr't. money.

Zacheriah Connell v Nathaniel Brown Ag'd.

Alexander Bowling v Francis Morrison Cont'd.

Christian Summitt v John Gallehor & wife Cont'd

Hugh Sterling v Mordecai Richards Cont'd.

Benjamin Wells v Hugh Newell Cont'd.

Isaac Vance v Daniel Williams Ej. Cont'd.

Hugh Brawdy v Jacob Feagley Cont'd.

William Brasher v Robert Hamelton Cont'd.

John Smith v Sarah Dye Dismiss. p. Dead.

Thomas Cook v James Ferrell Ejmt. Cont'd.

Joseph Cox v John Williams, Theodorus Daviss & wife & Mary Hazle Cont'd & P. R.

Joseph Cox v John Williams and Theodorus Daviss C. P. R.

John Lydea v Joseph Cox Cot'd.

Dorsey Pentecost v Christopher McDonald, Cont'd.

Oliver Miller Gentleman named in the Commission of the piece, came into Court and Took the oath of Justices of the piece, and Justice of Oyer & Terminer.

- (29) William Christy & Joseph Nichols enter themselves as Sureties for Jacob Bousman's punctually & faithfully keeping proper & suitable Boats & hands for ferrying the Inhabitants across the River at his ferry Backwards & forwards, in the penal sum of five hundred pounds.

Rodrick Frazer and John Ferry appointed Constables to Serve the Ensuing year, and that they be summoned before some one Justice for this County and Qualify into said Office.

Thomas Gist v Richard Waller Cont'd.

v John Hall Cont'd.

v Henry Boyles Cont'd.

John Lawrence v Thomas Rogers Cont'd

Thomas Cooke v Levington Thomas, Cont'd.

Elizabeth Burriss v Naomi Tropman Con.

Leave is granted William Anderson to keep an Ordinary at his Duiling House in this County, he having Complied with the Law.

Archibald Hull v Thomas Bondfield Cont'd.

Joseph Wherry v John White Contd. at plaintiffs Costs.

Ordered that a Dedimus Issue to take the Examination of Matthew Rogers & Ezekil Johnston, Witness in behalf of John White at the suit of Joseph Wherry.

Mary Burriss v John Johnston & Michael Humble. Cont'd
P. R.

William Dunnanghain v James Gray. Cont'd.

John Peare Senr. v John Reredin. P. Dead. Dismiss'd.

John Nelson v Jacob Shilling Cont'd.

Jacob Shilling v John Nelson Contd.

Daniel Byers v James Patterson. Contd.

William Brue v Archibald Frome Dismissd at plaintiffs request.

- (30) John McDonald having obtained an Atteach. against Nathanie Patten, and the Constable having returned that he had Leveyed said Atteachment in the hands of Andrew Link and William Willson, and Sommoned them as Garneshees. Ordered that the sd. Link & Wilson be forced before the next Court to Shew

how much & what they have in their hands of the Estate of sd. Patten.

Upon the Motion of William Marshall Ordered that his marke a Crop in the left ear and Crop and slit in the right ear be recorded.

John McCullum v Isaac Gallard
v Tacitus Gallard In Case.

This day come the parties and agreed to submit their Controversy to the Justices now sitting, and after hearing the Allegations and Defence are of Opinion that the Defendants have paid the Debt in the Declaration mentioned, and ordered to be Dismissed.

Upon the motion of John Trumbo Ordered that his mark a Crop and upper bill in the near Ear, and his Brand I^oT be recorded.

Benjaman Jones v Patrick McDonald. P. C.
Zacheriah Connell v. Abraham Vaughan. P. C.
David Willson v. Henry Bowling Agrd.
John Sperry v Samuel Beeler C. O.
John Gallehan & wife v. Christian Summitt P. C.
Joseph Lindsey v. George Long. C. O.
Richard Swessichs v Jacob Jones P. C.
Paul Froman v Robert McCrowry P. C.
Francis Morrison v David Swigert C. O.
George Schley v John Rammage agd.
Susannah Schley v Robert McKindley S. R.
Thomas Freeman v John Lynch. { Dismissed
v Samuel Lynch. { at Plaintiff's
v James Lynch. { Request.
(31) Jacob Bousman v Jos. Bradley. Agreed.
Froman v Dean Plu Cap.
Cook v Dickerson P. Cap.
John Pearce Senr. v Aron Carter In Case p. Dead. D.
v the same same Order.
Thomas Wells v Paulcer Shillings C. O.
Joseph Pearce v Arnold Evins P. Cap.
Andrew Steel v Joseph Rolstone P. C.
Stout v Thompson & wife agreed.

W^m.Thompson v John Fife Sen. agrd.

Cloe Riggs v Ebenezer Corn P. C.

Moses Thompson v William Carpenter P. Cap.

Dorsey Pentecost v Jacob Long C. O.

William Brashers v Robert Hamelton. P. C.

John White v Ezekiel Johnston P. C.

Nicholas Dawson v Francis Kirkpatrick P. C.

William Thompson v John Fife Sen. agreed.

John Campbell v William Patterson P. C.

William How v William Geneway	} P C
v Ebenezer Corn	
v George Corn Ju.	

John Springer v James Dunnaughhow. agreed.

Joseph Barker v John Springer. The plaintiff Living out of the Country. the Defendt. dem'd. security for costs, which was not Complied with and Ordered to be Dismissed.

Benjaman Fullum v John McCornish. P. Cap.
the same Plu

Mary Burriss v David Williams. P. C.

James Patterson v Aaron Carter . agreed

James Murphy v Mordacai Richard P. C.

Paul Froman v William Stephens P C

Mary Burriss v Abraham Jones P. C.

(32) Sam Johnston & Isaac McMichel produc'd. Commissions from his Excellency the Governour appointing them Ensigns of the Militia which ware red & swore to accordingly.

John Chamberlain produced to this Court a Commission from his Excellency the Governour appointing him Lieutenant of Militia which was red & swore to accordingly.

James Faisaithe come into Court with Mabary Evins and James Holliday, and did acknowledge to owe to Patrick Henry Esq. Governor and Chief Majestrate of this Common Wealth or his Successor in Office in the Sum of Twenty pounds. the said Fasithe and his Sureties in the sum of Ten pounds each, to be Levied on his goods and chattles Lands and Tenements for the use of the said Patrick Henry or his Successor in Office if default is made in this Condition, that the said James Fasithe shall be of good Demeaner to this Common wealth, and all the

Leage People Thereof for the Term of one year and one Day Ensuing the date hereof.

Ordered that John Wall, James Wright, Andrew Vaughan and Benjamin Collings or any three of them being first Sworn do appraise the goods Chattles and Credits and Slaves if any of the Estate of Samuel Richardson deceased, and make return to Next Court.

John G. Masterson is Recommended to his Excellency the Governor as a proper person to serve as Lieutenant of the Melitia.

John Daniel is recommended to his Excellency the governor as a proper person to Serve as Ensign of the Melitia.

- (33) Upon the motion of Joseph Philis Ordered that his mark a crop and slit in the right ear, and a Swallow fork and half penny one left Ear be recorded.

Upon the motion of Henry Hoglond ordered that his mark a Crop and under slit in the Left ear, and an under bit in the right ear, be recorded.

Upon the motion of John McDonald Ordered that his mark a Swallow fork in the Left ear and Swallow fork and under bit in the right Ear be recorded.

Bazel Stotner is appointed Consta to serve the Ensuing and that he be Sommoned before William Goe Gentleman to Qualify into said Office.

Upon the Motion of Thomas Moore Ordered that his make a Cropt and Slit in the right ear and two slits in the Left, be recorded.

Henry Boyles, Thomas Philip & Jacob Knap, are appointed Constables the Ensuing year, and that they be Sommoned to appear before some one Justice of this County and Qualify into said Commission.

Ordered that Isaac Cox, Thomas Freeman & Andrew Swearingen Gentlemen distribute the Cards Consigned for this County upon proper & suitable Sertoficates to them produced, and that two thirds be delivered Isaac Cox and Andrew Swearengen, and one third to Thos. Freeman Gentleman.

Ordered that the Gentlemen named in the Commission of peace for this County yet Remaining unqualify'd be Summoned to next Court to qualify accordingly.

John Campbell Gentleman named in the Commission of the peace & Commission of Oir & Terminer Came into Court & took the oath of Justice of the peace & Justice of Oir & Terminer accordingly.

- (34) Ordered that Court be adjourned untill Court in Course.

GEORGE VALLANDINGHAM.

- (35) At a Court continued and held for Yohogania County June the 22nd. 1778.

Present Isaa. Cox, Benjamin Kirkindall, Benjamin Frye, Samuel Newell, Gentlemen Justices.

Inventory of the Estate of Conrod Swessicks deceased, returned by the appraisers and Ordered to be Recorded.

Joseph Beeler and Joseph Beckett Gentlemen named in the Commission of the Pice and Commission of Oyer and Terminer came into Court and took the Oath of Justice of the piece and Justice and Justices of Oyer and Terminer.

James Brue v. Benjamin Patton. Rich'd McMahon S P

Andrew Steel P.

v In Case

Joseph Rolston Jr. Then come the parties and agreed to Submit their Controversy to the Justices now sitting. Jud'm't. for 24 L. Cur. Money & Costs.

Bargain and Sale Gasper Carther to David Andrews, for Tract of Land was proved by the oath of David Welch one of the Subscribing Witnesses thereto and Ordered to be recorded. Samuel McBride, & James Scott witness Thereto was attested at a former Court, to the Execution of 1st Bargain and Sale.

Charles Masterson, John Daviss, Jonah Potter & Shadrach Carter, William Masterson & Joseph Hart took the Oath of Allegiance and Fidelity.

Reuben Case and John Guttery being bound in recognizance, and stands charged with Secreting abeting and . . . abeting the Secreting Theophilus Case a Continental Soldier. Ordered to be Dismissed.

James Richards v Mordeca Richards, John McCormick S. B.

Benjamin Fullum v John McCornish, Mordeca Richards S. B.

Mary Burriss v David Williams, Saml. Devoir S. B.

David Williams took the oath of Allegiance and Fidelity to the State.

Paul Froman, Plant.

v

In Case.

William Stevens Defd. At Request of Parties Ordered to be Referred to John McDowell, James Allison, Thomas Eger-ton, Jacob Long, Leverton Thomas, John Cox and John Wall and return this Judgment to next Court.

Bargain and Sale Paul Froman to Joseph Beckett for a Sur-vey of Land on the Monaungahela River including Froman's old mill. Acknowledged by said Froman and Ordered to be Recorded.

Edward Hughey produced a License from the Presbytry of London Derry in the kingdom of Ireland to Preach the Gospel of Jesus Christ, which was Read. Whereupon the said Edward came into Court and Took the Oath of Allegiance and Fidelity to this Common Wealth.

William How v. George Corn Jur, William Jencons, George Corn Sr. S. B.

Upon the Petition of Paul Froman Ordered that Nicholas De Pugh, John Lovejoy, Robert McGee, and James Colvin or any three of them View a Road the nearest and best way from Devoir's Ferry to Pentecost's Mills on Charteers passing by Fromans Mill on Mingo Creek and report the Conveniences and Inconveniences to Next Court.

(37) Licese is Granted Jacob Judy to keep an Ordenary at his Duiling House he having Complied with the Law.

B. Frye Abst.

James Boyer v Paul Froman, Benjamin Frye S. B.

B. Frye Gent. Prest.

Henry Newkirk v Jacob Shilling, John Williams S. B.

Paul From v Robert McCrowry, Michael Powers. S. B.

Assignment of a Bill of Sale. Andrew Devoir Frederick Cooper. Acknowledged by Samuel Devoir one of the Assinees on sd Bill of Sale. Ordered to be Recorded.

License is granted David Dunking to keep an Ordenary at his House in the Town of Pitts Burgh he having Complied with the Law.

Writ of Adquidomcen¹ is granted Paul From to condemn an Acre of Land to Build a Mill on a Branch of Mingo Creek.

William Johnston enters himself Defendant at the suit of Timmothy Turnout Lessee of David Andrews against Sawney Saphead.

License is granted Francis Kelder to keep an Ordinary at his Dweling House He having Complied with the Law.

Richard Yeats Gentleman Named in the Commission of the peace and Commission of Oyer and Terminer came into Court and Took the Oth of Justice of the peace and Justice of Oyer and Terminer.

James Hogland Produced a Commission from his Excellency the Governor appointing him Lieut. of the Militia, which was read and sworn to Accordingly.

(38) John Hogland v Matthew Loghlin, Mastick Carter S. B.
v George Riggle, Shadreck Carter S. B.

Walter McFarlin v Samuel Beeler, Geo. McCarmick S. B.

Thomas Smallman Gentleman Named in the Commission of the Peace and Commissioner of Oyer and Terminer, came into Court and took the Oath of a Justice of Peace and Justice of Oyer and Terminer.

Daviss Ruth enters himself Defendant at the suit of Timmothy Turnout Lessee of John Decker, against Sawney Saphead.

James Matthew v William Hibbitt, Anthony Corker S. B.

Administration of the Estate of Dennis Stephens dec'd. is granted to Daviss Ruth he having complied with the Law.

Ordered that David Richie, Luther Colvin, Nicholas Depugh, & John Miller or Any three of them being first Sworn do appraise the goods, chattles, Credits and Slaves if any of the Estate of Dennis Stephens deceased and make return to next Court.

Leave is granted John Reredin to keep an Ordinary at his dweling House in this County he having Complied with the Law.

Upon the Petition of John Miller seting forth that William Cills is aged and Infirm and Not able to maen himself, Ordered that Thomas Smallman Gentleman agree with some proper person to support and maintain the said William Cills, and

¹ So written, but possibly intended for "ad damnum inquirendum."

that such person bring in his account at the Laying of the next Levy.

William Deal is appointed Constable in place of Malechias Hays.

(39) Whereas George McCarmick Gentleman was at a former Court appointed Sheriff for this County, for one month, and at the same Time recommended the said George McCarmick to his Excellency the Governor as a proper person to Serve as Sheriff for this County by the Ensuing year, and no Commission as yet arrived for the said Sheriff, and his pro Tempory appointed being now Expired, the County is without a Sheriff. Ordered that the said George McCarmick Gentleman be appointed Sheriff for this County for and During the Term of one Month next Ensuing he complying with the Law.

John Gibson Gentleman named in the Commission of the pice and Commission of Oyer and Terminer come into Court and Took the Oath of Justice of the pice and Justice of Oyer and Terminer.

Zacheriah Connel v Abraham Vaughan, Mordeca Richards S. B. John Campbell Gentleman Present.

Ordered that William Deal be fined Ten Shillings for Refusing to Serve as Constable.

Ordered William Evins be appointed Constable the Ensuing Year, and that he be Sommoned before the nearest Justice to Qualify into said Office.

A Request from the Court of Ohio [County] to call on the Commissioners for adjusting the Boundery Line between this County and the sd. County of Ohio. This court are of Opinion that the sd. Request is highly reasonable. It is Therefore Ordered that the Commissioners on the part of this County doth proceed to finish the Business to which they have been appointed and make report to next Court.

Thomas Bay produced a Commission from the Governor appointing him Lieut. of the Militia which was read and Sworn to Accordingly.

John Campbell Abst.

(40) License is granted to James McClellen to keep an Ordinary in the Town of Pittsburgh he having Complied with the Law.

Ordered that William Masterson, Charles Masterson, John

Guttery, Mesheck Caster and Richd. Hoopkins, who is Guilty of a Briech of the peace in the presence of the Court, be and remain in the Custody of the Sheriff and be brought before the Court Tomorrey at seven oclock.

Ordered that Court be adjourned untill tomorning 7 oclock.

THO. SMALLMAN.

June 23. 1778. Court met according to adjournment.

Isaac Cox, Thomas Smallman, Benjamin Frye, Joseph Beckett, Samuel Newell, Joseph Beeler, Gentlemen Present.

Walter Grayham having obtained an Attach. against the Estate of Robert Strain who is said to be so Absconded that the Ordinary process of Law cannot be Served upon him for Nine pounds & Six pence Pennsylvania Curr'y. and the Constable having returned that by Virtue of sd. Att'mt. he has attech'd one Cow, and no more of the Estate of the sd. Robert, and the sd. Robt. failing to app.^r. and Repevy the sd. Att'd. Effects, though Solemly called, the sd. Walter produced a Note against the sd. Robert for thirteen pounds P. V. Currency. It is Therefore Considered that the Plaintiff Recovered against the Deft Seven pounds, Twelve shilling, & five pence Cur. money of the Value of the afo'sd. nine pounds and Six pence P V Currency. Ordered that the Sheriff make Sale of the Att'd. Effects, and satisfy the plant. this Judgmt with Costs, and make return to Court.

(41) Upon the Petition of Richard Yeates Ordered that Henry Taylor, James Allison, James Patterson, William Brashers, or any three of them being first Sworn View a Road from Catfish camp to Pentecosts Mills and make report of the Conveniency an Inconveniency to next Court.

Samuel Newell Gent. Ab't.

Administration of the Estate of Thomis Lewis deceased is granted Robert Newell he having complied with the Law.

Ordered that David Vance, David McCaw, James Tucker, and George Vance or any three of them being first Sworn appr. the Estate of Thomas Lewis deceased and make return to next Court.

Upon the Petition of Anthony Dunleavey ordered that Robert Henderson, Georg Redman, Richard Crooks and William Anderson or any three of them being first Sworn View a Road

from Pittsburgh to Pentecosts mills on Churtees and make report of the Conveniency and Inconveniency to Next Court.

William Crawford, John Stephenson and William Harrison Gentlemen Named in the Commission of the pece and Commission of Oyer and Terminer come into Court and Took the Oath of Justice of the pice and Justice of Oyer and Terminer.

John Campbell and John Gibson Gent. Pt.

George McCarmeck Gentlemen came into Court and Took the Oath of his high Sheriff for this County for the Term of one Month.

Hugh Sterling come into Court and Took the Oath of Deputy Sheriff for this County for the Term of one month.

- (42) Hugh Ohara with James McClelland & Walter Graham his Securities came into Court and acknowledged themselves to be indebted to Patrick Henry Esqr. Governor &c that is to say the said Hugh Ohara in the sum of £ 100 and the said James McClelland and Walter Graham in £ 50 each to be levied upon their respective Goods & Chattells lands and Tenements for the use of this State upon condition that the said Hugh Ohara shall personally appear before the Justices of this County at the next August Court then and there to answer to such Matters and things as shall be objected against him touching his being Accissary to the desertion of two Soldiers and not to depart the Court without leave, &c.

Margaret Brannon with Henry Heth Gent. her Security came into Court and acknowledged to be indebted to Patrick Henry Esq^r. Governor &c. in the sum of £30 conditioned for the personal appearance of Margaret Brannon at the next august Court then and there to prosecute the above Hugh Ohara and not depart the Court without leave &c.

Malachia Hays v William Deal, Hugh Ohara Sp. Bl.

John Minter Gent. took the Oath of Capt. of the Militia & William McCormick Lieut.

Robert Newell is recommended a Lieut. of Militia and took the oath accordingly.

Richard Swisicks v Jacob Jones

Jas. Keykendal S. B.

Benjamin Vanatre v Jas. Keykendal

Jacob Jones S. B.

- (43) John Ormsby obtained license to keep an Ordinary in the Town of Pittsburgh he having complied with the Law &c.

Mary Irwin obtained License to keep an Ordinary at Pittsburgh she having complied with the Law.

Joseph Vance came into Court and took the Oath of Captain of the Militia to which he is recommended.

Ignace Labat obtained License to keep an Ordinary at Pittsburgh he having complied with the Law.

Joseph Glass is recommended as Lieut. of the Militia and John Rankins Ensign.

William Masterson, Charles Masterson, Richd. Hopkins, John Guthery & Meshech Carter who were yesterday committed to the Sheriff's Custody being brought before this Court, it is the opinion of the Court they be fined viz. William Masterson & Richard Hopkins 40 S. each and that Richd. Hopkins be fined in the additional sum of 5 S. for drunkenness and that John Guthery & Meshech Carter be discharged, the Court do further adjudge that Charles Masterson be fined 20 S. for rioting and the further sum of 10 S. for swearing two profane Oaths.

Absent Isaac Cox.

Saml. Wall v John McCallister, Richd. McMahon S. B.

Absent Majr. Smallman & John Gibson Gentlemen.

- (44) Ignace Labat and John Irwin appeared in Court charged that they on the night of the 14th of April last did encourage a number of prisoners then in Confinement for disobedience of Orders, refusing their duty as Militia and Mutiny to break their Arrest and for opposing the officer in the Apprehending of them, it is the opinion of the Court that they be bound over to the next Grand Jury Court. Whereupon the said John Irwin with John Gibson & Thos. Smallman his Sureties acknowledged to be indebted to Patrick Henry Esqr. Govr. &c. that is to say the said John Irwin in £ 100 and the said John Gibson and Thos. Smallman in £ 50 each conditioned for the personal appearance of the said John Irwin at the next Grand Jury Court, and in the meantime be of good behaviour and not to depart the Court without leave &c.

Absent John Campbell, Gent.

It is also the Judgment of the Court that Ignace Labat be likewise bound over to the next grand Jury Court, whereupon

the said Ignace Labat with John Gibson & Thomas Smallman Gent. his Securities acknowledged to owe to Patrick Henry Esq. Governor &c. the following sums, viz. Ignace Labat the sum of £ 100 and the said John Gibson and Thos. Smallman the sum of £ 50 each to be levied &c. upon condition that the said Ignace Labat shall personally appear at the next Grand Jury Court to answer the above Complaint and that in the meantime he be of good behaviour and not to depart the Court without leave &c.

Present Isaac Cox Gent. & John Campbell Gent.

On motion of James McMichael Ordered that his Ear-mark a Crop and a Slit in each Ear be recorded.

Joseph Beeler Jun. came into Court and Took the oath of Deputy Sheriff.

Petition & Summons John Allen Thorp against Thomas Applegate ; Ordered to be Dismissed at Plaintiffs Costs.

Andrew Dodge obtained License to keep an Ordinary at his Dwelling house on the Road from Devoir ferry to Shirtee's Creek, he having complied with the Law &c.

Ordered that William Crawford Gent. be appointed a Commissioner with Richard Yates & Isaac Leet for adjusting and settling the Boundary Line between this County and the County of Ohio.

- (45) Thomas Lapsley a Lieut. in the Militia came into Court and informs them he is in dayly fears on acco't of being apprehended by the Millitary Law and desires the protection of this Court on a Matter which from the testimony of the Evidence now aduced appears an Affair of Slander. the said Mr. Lapsley now surrenders himself to this Court. Whereupon Proclamation being made that if any person could ought say against the said Thos. Lapsley they might then be heard, but none appearing the Court are of Opinion the said Mr. Lapsley be and he is hereby discharged.

Ordered that the wife of George Frederick Kiper a Soldier in the Continental Service be allowed the sum of Four pounds per month for the support of herself and three children.

Ordered that Three pounds per Month be Allowed to the three Children of John Evans a soldier of Capt. Heths Company in the Contl. Service.

Ordered that Court be adjourned until Tomorrow morning
6 oclock. THO. SMALLMAN.

June 24th, 1778. The Court met pursuant to their adjournment.

William Crawford, Thomas Smallman John Stephenson,
William Harrison, Joseph Bealer, Gentlemen Present.

- (46) Ordered that Colo. John Stephenson and Colo. Isaac Cox do call on Thomas Brown and receive from him the Cotton and Wool Cards sent up to this County, one half of which are to be distributed in the Battalion of Colo. Stephenson and the other in that of Colo. Cox. These Gentlemen to whom this charge is intrusted are to conduct themselves agreeable to the Governors Letter to the Justices of this County on the 26th Novr. last, provided that if there are more Women in either Battalion Colo. Stephenson & Colo. Cox are to supply each other according to the number of persons who may have a right to obtain the same.

Ordered that the Sum of 40 S. per month be allowed to the widow of James Shirley killed in the Service, then a Soldier in the 13th Virginia Regiment in the Service of the United States, for the support and maintenance of herself and Child, the same to commence from the 25th March last.

Ordered that Christiana Churchill the wife of Charles Churchill, now in the 12th Virginia Regiment in the Continental Service be allowed Three pounds per month for the Support of herself and two Children.

Ordered that Hannah Burns the wife of Matthew Burns late of the 11th Virginia Regt. deceased then in the Continental Service be allowed the Sum of 40 S per month for the Support and maintenance of herself and one Child.

Ordered that Mary the wife of John Overlin a Soldier in the Service of the United States and now in the 13th Virg'a. Regiment be allowed £ 5 per month for the support and Maintenance of herself & four Children.

- (47) Ordered that Bridgit Blackston the Widow of Prideaux Blackston a Soldier in the 13th V. Regt. deceased then in the Continental Service be allowed £ 3 per month for the Sustenance and support of herself and two Children.

Ordered that the Support of the Wives of Soldiers and Widows of Soldiers deceased with their Children unless particularly ascertained from some particular date, such Support shall commence from the 25 March last. And that Colo. Campbell be requested to supply such distressed families agreeable to the order of this Court, and the Clerk of this Court is to draw upon the Tresurer of this Common Wealth in favor of the said Colo. Campbell for the purposes aforesaid to the 25th September next, it is further the opinion of the Court that Colo. Campbell advance to such distressed families the Allowance granted by this Court to the 25th July and to retain the Balance in his hand subject to the farther Order of this Court.

On the Petition of Colo. John Campbell setting forth that he is desirous of building a Mill on Charties Creek — that the Land on both sides of the Creek where he intends to build his dam in his own property, but he is apprehensive that some lands the property of some persons to him unknown at the mouth of Robinson's Run may be flooded by the Back Water of his Dam. Ordered that the Sheriff summon 12 freeholders of the vicinage to meet on the Land so said to be affected by the back water from his said Dam, and such Jury are to value the Damages and report the same to next Court under their hands and Seals.

(48)

Ordered that the following Gentlemen be appointed to receive the lists of Tythables within the following districts viz : — John Campbell Gent for the district of Capt Lee & Capt Bousman. Benjamin Keykendal Gent. for the districts of Capt. Evans & Capt Z. Wright. Joshua Wright Gent. for the districts of Capt. Jas. Wright & Capt. Cook. Benjn. Fry Gent. in the districts of Capt. David Ritchey, Capt. Ellis, & Capt. Kemp. John McDaniel Gent. for the district of Capt. David Andrews, Capt. Records & Capt. Nicholas Dawson. George Valandingham Gent. for the districts of Lieut. Newill. Andrew Swearingen Gent. for the districts of Capt. Vance, Lieut. Bay and Capt. Matthew Ritchey. Richd. Yates Gent for the Districts of Capt. A. Swearingens, and the district late Major Taylors. Isaac Cox Gent for Capt. Baxters district. Thos. Freman Gent for his own district & Capt. Ford's. William Harrison Gent for the district of Capt. Pearce. William Goe

- (49) Gent. for Capt. Springer's district. Joseph Becket Gent. for Capt. Crows district and John Stephenson Gent. for the district of Capt. Minter.

Samuel Devoir is appointed Constable the Ensuing year, and that he be Sommoned before the nearest Justice and Qualify.

Inventory of the Estate of John Vance Deceased returned by the Appraisers and Ordered to be recorded.

Peter Stasey is appointed Constable for the Ensuing year who is to be Sommoned before the nearest Majistrate to Qualify in sd Office.

Ordered that William Crawford & David Shepeard Gent. do lay out the Prison bounds for this County agreeable to Law and report to this Court.

The said William Crawford and David Shepherd Report as follows. Beginning at a Large Black Oak Standing Easterly from the Court House and Marked with Six Notches, and Extending Thence Southerly by a Line of Marked Trees to a White Oak Marked with Six Notches, Thence Westerly by a line of Marked Trees to White Oak Near and Including a Spring, Thence Northerly by a Line of Marked Trees Including the House of Paul Matthews to a White Oak, Thence by a Line of Marked Trees to the Beginning, which is ordered to be recorded.

Upon the motion of George McCarmeck Ordered that his mark a Lower half Crop on the Left Ear and Crop on the Right Ear be recorded.

- (50) Upon the motion of George McCarmeck in behalf of Thomas Cherry Ordered that his ear mark a Crop in the Right ear be recorded.

Ab't. John Stephenson Gent.

Upon the motion of John Stephenson Gent. Ordered that his mark a Crop and hole in the Left ear a Slitt in the right Ear be recorded, and his Brand a figure of 3 on the near Shoulder and figure of 7 on the near Buttock be recorded.

Upon the motion of Thomas Spencer Ordered that his mark a Upper half Crop in the Left Ear and Under half Crop on the right Ear be recorded.

Upon the motion of John Campbell Gent. Ordered that his

Ear mark an under half Squear in Each Ear be recorded, and his Brand I C On the near shoulder be recorded.

Upon the motion of Joseph Beeler Gent. Ordered that his mark a Slit in the Left ear and a hole in the right Ear be recorded, and his Brand Thus J. B. on the near shoulder be also recorded.

Upon the motion of Henry Heath Gentleman Ordered that his Mark a upper half penny in the Left Ear and upper half penny in the Right Ear be recorded, and his Brand an H on the Near Shoulder be recorded.

Upon the motion of William Harrison Ordered that His mark a Swallow fork in Each Ear be recorded.

Upon the motion of Dorsey Pentecost Ordered that his mark a Crop in the Left Ear and Crop and Slit in the right Ear be recorded.

Ordered that Court be adjourned to Court in Course.

THO. SMALLMAN.

(51) At a Court Continued and held for Yohogania County July 27th, 1778.

Present Isaac Cox, Benjamin Kirkendall, Joseph Becket, Joshua Wright, Gentlemen Justices.

James Rogers Gent. named in the Commission of the peace and Commission of Oyer & Terminer came into Court and swore to the Same.

Joseph Cox v John Beetsman, John Williams S. B.

James Vanatre v William Braden, Thomas Bamfield S. B.

James Vanatre v Joseph Perkeson, William Fry S. B.

William Caldwell v William Fry, Thos. Lapsley S. B.

William Caldwell v Peter Reasner, Thomas Lapsley S. B.

Two deeds of Surrender William Fry to Adam Wickerham acknowledged by said Fry party thereto and ordered to be recorded, and two Assignments thereon from said Wickerham to Nicholas Depugh was also acknowledged by said Wickerham and likewise ordered to be recorded.

Thomas Lapsley who stands bound by Recognizance taken before John Gibson, John Stephenson & Wm. Harrison Gent. to this Court personally appeared and no evidences appearing to prosecute Ordered the said Thos. Lapsley be discharged from his Recognizance.

- (52) Recognizance of John Springer was produced in Court but neither party appearing Ordered to be continued over to next Court.

Robert Henderson v John Kinkead, Benjn. Kirkendal Gent. S. B.

John McCullom v Isaac Galliard, Common Order against Deft. & app. Bail.

Report of the Commissioners for settling and adjusting the Line between this County and that of the Monongahela County returned by the said Commissioners and Considid with by the Commissioners on the part of the said County of Monaungala, is Ordered to be confirmed, as the Bounds between this County and the said County of Monaungahela and Ordered to be recorded.

John McAnulty

v

Petition. Ordered to be Dismissed at

John Armstrong Plaintiff's Request.

Dorsey Pentecost clerk of this Court informed the Court on Oath that at a Court held for this County April 28th last Martha Davis acknowledged two Indentures to Isaac Cox Gent but through the hurry of Business the Letter S. was left out. It appears to the Court that the Indenture was executed by said Martha and by her acknowledged and it is ordered to be recorded.

Bill of Sale William Portor to James Ellis with the Return of Isaac Cox and Joshua Wright Gent of the Examination of Catherine Collins an absent witness Ordered to be recorded.

- (53) Ordered that the Award of George Valandingham, Henry Taylor and John Hull in the Action between John Springer and Henry Kearsey be set aside the proceedings of the said arbitrators appearing to be illegal.

Paul Froman

v

In Case

William Stephens Award returned and confirmed by the Court for the sum of four Hundred Eighty pounds Eight Shillings and his Costs about this Suit in that behalf Expended.

Ordered that Francis Reno be recommended to his Excellency the Governor as a Proper Person to serve as Captain in

the Militia in the Room of William Lee now in the Continental Service.

Ordered that Jane the wife of Greenberry Stors a poor Soldier in the Continental Service from this State be allowed the sum of two pounds pr. month for the support of herself and one child to Commence the first day of May last, and that this Court draw on the Treasurer of this Common Wealth for the Same up to the 25th day of Sept. next.

Recognizance of Christian Lestnett and wife, Christian Lestnett Jun. Frederick Lestnett, Francis Lestnett and Stoffel Lestnett was Return and no prosecutors appearing Order to be Continued.

- (54) View and Report of the road from Devoir's ferry to Pente-costs mills on Churteers Creek returned by the Viewers, Ordered to be set aside.

Ordered that Court be adjourned untill Court in Course.

ISAAC COX.

At a Court Continued and held for Yohogania County August 24th 1778.

Present Isaac Cox, Joshua Wright, Richard Yeates, James Rogers, Gent. Justices.

Ordered that Letters of Administration be granted to Elizabeth Ketchum and William Ketchum the Widow and bro'r of Samuel Ketchum decd. they having complied with the Law. Whereupon the said Eliza. and William came into Court and entered into Bond and Oath accordingly.

Oliver Miller & Andrew Swerengen Gent. Present. Joseph Beeler Gent. Prest. Joseph Becket Gent. Prest. Saml. Newell, Gent. Prest.

Joseph Beeler Gent

v

Isaac Pearce S. B.

Ebenezer Walker.

Benjn. Kekendal Gent. Prest.

John Daniel produced a Commission from his Excellency the Govr. as Ens'n of Militia which being read the said John Daniel swore to the same.

John Masterson came into Court and took the Oath of Lieut. of the Militia he having produced his Excellency the Gov'rs. Commission.

- (55) Richard Elson produced a Commission from his Excellency the Governor appointing him Ensign of the Militia, which being read the said Richd. swore to the same.

Saml. Newell Gent. Absent.

Administration of the Estate of John McCoy deceased is granted to Margaret McCoy his widow she having complied with the law. Ordered that Philip Philips, Jonathan Philips, John Nicholas & John Philips or any three of them being first sworn do appraise the Estate of John McCoy decd. and make return to next Court.

Ordered that Andrew Pearce, Richd. Johnston, James Wall and Richd. Sparks or any three of them being first Sworn do appraise the Estate of Samuel Ketchum decd. and make return to next Court.

Administration on the Estate of Thomas Brasher decd. is granted to Robert Brasher his Bro'r. he having complied with the Law. Ordered that Robt. Jackman Basil Stoker, Jeremiah Riggs & William Jackman or any three of them being first Sworn appraise the Estate of Thos. Brasher decd. and make return to next Court.

Patrick Jordan acknowledged two deeds of Bargain and Sale to Charles Norris which are ordered to be recorded.

John Gibson Gent came into Court and acknowledged a deed of Surrender to Matthias Slough Esq. 1000 Acres of Land on the Ohio which is ordered to be recorded.

- {56} Thos. Freeman Gent. Present.

Ann Brook being bound over to answer the Stealing two pounds of Coffee from Sarah Sample appeared before the Court when no evidence appearing, Ordered that the same be dismissed.

John Logan enters himself Deft in an Action of Ejectment at the Suit of Walter Graham.

William McMahan produced a Commission from his Ex'cy the Governor appointing him Lieut. of Militia & took the Oath to the Same.

John Hall

v

John Williams S. B.

Joseph Wells

Report of the County Line returned by Richd. Yeates, Wm.

Scott, Jas. McMechen & Isaac Leet Junr. read in Court and Ordered to be recorded.

License is granted to John Bradley to keep an Ordinary at his Dwelling house at Pittsburg he having Complied with the Law.

John Hall

v

Nichs. Dawson S. B.

Joseph Waller

Ordered that the Court be adjourned to 7 o'Clock tomorrow morning.

RICHARD YEATES.

- (57) Court met Pursuant to adjournment August 25th. 1778.
Present William Goe, Richard Yeates, Samuel Newell, Oliver Miller, James Rogers, Joseph Beckett.

Deed of Surrender John Bull to Nicholas Peese acknowledged by the said Bool and Ordered to be Recorded.

Deed of Surrender Paul Froman to Adam Wickerham acknowledged by said Froman party thereto and Ordered to be recorded.

Deed of Surrender. James Fergurson to Adam Wickerham Acknowledged by said Furgerson party thereto and Ordered to be Recorded.

Deed of Surrender John Bolley to Michael Teggart acknowledged by said Bolley and ordered to be recorded.

Administration on the Estate of John Walker is granted to Gabriel Walker he having complied with the law. Ordered that James Ewen, John Bale, Alexr. McCandless and Thomas Redman or any three of them being first sworn do appraise the Goods Chattles and Effects and Slaves if any of the Estate of John Walker decd. and make return to next Court.

Inventory of the Estate of Edward Griffeth decd. ret'd. by the appraisers and ordered to be recorded.

Nicholas Dawson

v

Saml. Holmes S. B.

Fra's. Kirkpatrick

- (58) Present Andw. Swerengen and Benjn. Kekendal Gents.

Administration of the Estate of William McCoy decd. is granted to Philip Philips he having complied with the law.

Ordered that Jediah Ashcraft, Wm. Hinch Isham Barnet and Benjamin Sweet or any three of them being first sworn do appraise the Estate of William McCoy decd. and make return to next Court.

Administration of the Estate of William Lindsey decd. is granted to Michael Teggart he having complied with the Law. Ordered that Tobias Mattocks, Joseph Ross, Saml. Brice, & Thos. Bond or any three of them being first Sworn do appraise the Estate of Wm. Lindsey and make return to next Court.

Deed of Bargain & Sale and Receipt annexed from James Patterson to David McCrowry acknowledged by said James Party thereto and ordered to be recorded.

Deed of Surrender William Stephens to Andrew Devoier was proved by the Oath of Saml. Thompson and John Duke and Ordered to be certified.

Tobias Woods.

v

John McKee Maybery Evans S. B.

Daniel Swigert

v

James Murphy Michael Teggert S. B.

Thos. Freeman Gent. Absent.

An Indenture Jane Armstrong to Valentine Thomas D'Alton acknowledged by said Jane and ordered to be recorded.

(59) Ordered that Jane Armstrong the wife of Geo. Armstrong a deceased Soldier then in the Service be allowed for the support of herself and four Children five pounds per month to the 6th of July from 6th April and Three per month from said 6th July. Ordered that the Clerk do draw on the Treasurer for the same.

Mortgage John Steward to Jacob Bousman was proved by the oath of James Berwick the other evidences having heretofore proved the same. Ordered to be recorded.

On the Petition of James Johnson & others Ordered that Andrew Pearce son of James, James Wall, John Crow & Rich'd. Johnson or any three of them they being first sworn view a Road out of the Road leading from Gists to Devoirs ferry near And'w. Dye's passing thro' the forks to the Monongahela opposite the mouth of Mingo Creek thence Crossing the River the

nearest and best way to the Mill Froman is now building near the mouth of Mingo Creek.

Review of a Road from Peters Creek to the house of Robert Henderson beginning at the lower end of Zadock Wrights field from thence following the Ridge to Jacob Barrackmans land leaving him on the right hand and from thence to Martha Lapsleys Land leaving her to the right hand from thence to Robert Hendersons. returned by the reviewers & ordered to be confirmed.

Ordered that William Bruce be appointed Surveyor of the Road leading from Raredon's ford passing by Kekendals Mill to the house of Robert Henderson and that the Tythables within three miles of each side said Road work on the Same.

- (60) Ordered that Robert Craighead be appointed Surveyor of the Road from the top of the Ridge near James Wilson decd. to Raredons on the Monongahela and that the Tythables on both sides said Road work on the same within three miles thereof.

Ordered that Andrew Dye be appointed Surveyor of the Road from the House of Leonard Extine to the top of the Ridge near the house of James Wilson and that the Tythables between the two Rivers not exceeding three miles work on the Same.

Ordered that the Wife of William Shaw a poor Soldier be allowed three pounds per month for the Subsistance of her three Children from this date, and the Clerk to draw on the Treasurer for the Same.

Deed of Surrender Henry Taylor Gent to David Ridle acknowledged by said Taylor and ordered to be recorded.

Administration of Estate of Samuel Duncan Decd. is granted to David Duncan he having complied with the Law. Ordered that John Ormsby, Samuel Sample, Samuel Evalt and William Christy or any three of them being first sworn do appraise the personal Estate and Slaves if any of Samuel Duncan deceased, and make return to next Court.

Joseph Beeler Gent. Present.

Benjamin Vanatre Enters himself Defendt. in an Action of Ejectment at the suit of Henry Morrison.

- (61) John McDaniel Gent Present.

Bill of Sale Sarah Reed to Robert Blackley and John Reed for a negro named Pompey Approved by the oath of Joseph

Becket one of the Subscribing Witnesses and ordered to be certified.

George Lightenberger being summoned as a Garnishee in an Atta'm't. against Geo. Croghan at the suit of Simon & Campbell appeared before the Court and saith he hath one Wheat Fan the property of the said George in his possession and no more.

Henry Morrison.

v

Benjn. Vanatre S. B.

James Vanatree

On the Petition of David Williams & others Ordered that Abraham Miller, Henry Millier, Henry Newkirk and William Murley or any three of them being first sworn Do view a Road from Paul Fromans Mill on Mingo Creek to the Road leading from Pentecosts Mills to the Court House and make Return to next Court of the Conveniences and Inconveniences thereof &c.

On motion of Paul Froman Ordered that his Mark a Crop in the right ear be recorded.

On motion of David Williams Ordered that his Mark a Crop off each Ear and a half penny in the under side of the right ear be recorded, and his Brand D W be also recorded.

On motion of Isaac Springer Ordered that his Mark a Crop in the near Ear and a Nick and a Slit in the off Ear be recorded.

(62) On Motion of Robert Little Ordered that his Mark a half Crop in the Left Ear and an under bit in the right Ear be recorded.

On Motion of William Downs Ordered that his Mark a Crop off each Ear and a Slit in each Ear be recorded.

Benja. Jones

v

Patrick McDaniel William Deal S. B.

Deed of Surrender Henry Wood to Conrad Louthierback acknowledged by said Henry Party thereto and ordered to be recorded.

Two deeds of Surrender, Sampson Beaver to Thomas Cook acknowledged by said Sampson Party thereto and ordered to be recorded.

Ordered that Isaac Taylor be allowed the Sum of 94 Dollars for the Carriage of the Cards allotted to this County from Williamsburg and that Colo. Cox and Colo. Stephenson do account with said Mr. Taylor for the Same as sold.

Ordered that the Subsistence granted to the Wife and Six Children of William Shaw a poor Soldier who died in the Continental Service be extended to the 25th Sept. next. Vide, April 28th, 1778.

James Scott produced a Commission from his Excellency the Governor appointing him Captain of Militia which was read & sworn to accordingly.

James Wherry Produced a Commission from his Excellency the Governor appointing him Lieut. of the Militia which was read & sworn to Accordingly.

(63) George Vallandingham Gent. Present.

Ordered that the sum of Twenty Shillings p. month be allowed the wife of Daniel McCay, a poor Soldier in the Continental Service for her support.

Deed of Surrender John Hodgland to James Rogers acknowledged by said Hogland party thereto and ordered to be recorded.

Deed of Surrender Isaac Cox, to John Decker Acknowledged by said Cox and Ordered to be recorded.

Ordered that Thomas Bay be recommened to his Excellency the Governor as a proper person to Serve as Captain in the Melitia.

Thomas Bay produced a Commission from his Excellency the Governor Appointing him Captain in the Melitia which was read and Sworn to Accordingly.

Thomas Reed produced a Commission from the Governor appointing him a Lieutenant in the Militia which was read & Sworn to accordingly.

Richard Yeates, Absent.

Hugh McDonald produced a Duplicate of an Indenture Binding him the sd. Hugh a Servant for the Term of three and a half years, bearing Date the Twenty Ninth day of June 1775, which is not yet expired yet the said Hugh claim freedom from a Bargain between his late Master William Powel, & a former Master who sold the sd. Hugh to the said Powel, and

from the Evidence aduced to this Court, it appears that the sd. Hugh McDonald is a free Person.

(64) Hugh Brawdy

v In Trespass.

Jacob Feagley. Then came the parties and requested that This Suit should be refered. Ordered that The said Suit be refered to John Decker, William Taylor Morris Brady, John Corn & Vinson Colvin, and that they do return their Opinion to Next Court.

Ordered that Peter Rowleter be recommended to the Governor as a proper person to Serve as Captain in the Melitia, and James Miligan as Ensign.

Inventory of the estate of Samuel Richardson Returned by the Appraisers and Ordered to be Recorded.

William Renno a Minister of the Gospel come into Court and Took the oath of Allegience and Fidelity to this State.

Inventory of the estate of Archibald McNeal returned by the appraisers and Ordered to be Recorded.

Deed of Surrender John Hill to John Cannon acknowledged by sd. Hill and Ordered to be recorded.

Joseph Cox

v In Case.

John Williams At request of Parties Ordered That this Bright Daviss & Suit be Refered to Henry Taylor, John Mary Hoyle Duglass, Nicholass Little, John Ackerson, William Colvin, & John Lydea, and that they Return their Opinion to Next Court.

(65) Joseph Cox

v In Case

John Williams & At Request of parties Ordered That this Theodorus Daviss suit be refered to Henry Taylor, John Duglass, Nicholass Little, John Ackerson, William Colvin, and John Lydea, and make report to Next Court.

Ordered that Philip Ross be recommended to the Governor as a proper person to serve as Captain in the Melitia.

Philip Ross Produced a Commission from the Governor appointing him Captain in the Melitia which was read & sworn to accordingly.

Lewis Renno produced a Commission from the Governor appointing him Ensign of the Militia which was read & sworn to accordingly.

Joseph Alexander came into Court and took the Oath of Ensign of Militia agreeably to his Commission read in Court.

Ordered that Saml. Newell Gent. do wait on Colo. Campbell for the Acts of Assimby.

(66) On Motion of Jonathan Martin Ordered that his Mark a Slit in both ears be recorded.

On Motion of Samuel Dunn Ordered that his Mark two under half Crops in both Ears be recorded.

Ordered that Theophilus Case be appointed Constable to Serve the Ensuing year, and that he be Sommoned before James Rogers to Qualify into said Commission.

Ordered that Court be adjourned to Six Oclock tomorrow morning.

BENJA. KUYKENDAL.

Court met Pursuant to adjournment, August 26th, 1778.

Present. Samuel Newell, James Rogers, John M^cDonald, Isaac Cox, William Goe, Oliver Miller, Gentlemen Justices.

Christian Summitt

v

In case.

John Gollehair & wife. Ordered to be Dismissed at Plaintiffs Request.

Benjn. Kekendal, Present.

The Last will and Testament of James Freeman was proved by the Oaths of John Thompson & Gilbert Cammeron the Two Subscribing Witnesses and Ordered to be recorded.

(67) James Johnston

v

In Case.

Godfrey Waggoner At Request of Parties Ordered That this suit be refered to John Crow, Henry Miller, Nicholas Christ & John Decker, and that they report their Opinion to Next Court.

John McDonald Took the Oath of Executor of the Last Will and Testament of James Freeman Deceased.

John Cannon and Matthew Richie Gentlemen named in the Commission of the Piece and Commission of Oyer and Ter-

miner, Came into Court and Took the Oath of Justice of the Peece and Justices of Oyer and Terminer.

George McCarmick Gentleman produced a Commission from the Governor appointing him Sheriff for this County which was read, the Court demanded the sd. George McCarmick Gent. to enter into Bond according to Law, and Qualify into said Commission which he refused alleging that he was a Captain in the 13th Virginia Redgment in the Continental Service, and Contrary to his Expectation the General refused to permit him to resign his said Melitary Commission and that his serving as Sheriff was Incompatible with his duty in the Military department, it is the Opinion of the Court that the reasons are satisfactory.

Ordered that Matthew Ritchie, Joseph Beckett & James Rogers Gentl. be recommended to his Excellency the Governor as proper persons for his Excellency to Commission one as Sheriff to serve the Ensuing year.

(68) Matthew Ritchey Gent came into Court and took the Oath of High Sheriff for the Term of one month.

Joseph Ford produced a Commission from his Excellency the Governor appointing him Captain of the Melitia, which was read and Sworn to According.

Ordered that the Clerk forward the following Letter to his Excellency the Governor.

Sir

Permit the Justices of the County Court of Yohogania to address your Excellency, in Answer to Your Letter of the 2nd of May Last. We feal as we hope we ought for the Governours attention to the affairs of this County. The reasons of the Courts passing over the Colonel, Lieutenant Colonel, and Major, (which your Excellency formerly Commissioned) in their Late recommendation, was, that the Colonel and Major Informed the Court, or some Members thereof, that they had signified their resignation to your Excellency and their reasons for so doing, and that the Causes was not removed and refused to be recommended we have Only heard that your Excellency Commissioned Mr. Thomas Brown as Lieutenant Colonel, and that the said Mr. Brown refused Serving, as he was not recom-

mended by the Court. This we believe to be the State respecting the Lieutenant Colonel as a Commission did not Come up to Isaac Cox who was recommended as Lieutenant Colonel at the Time the Colonel was recommended. We also found the County Lieutenant furnished with Blank Commissions which he filled up to the field and others Officers on the spot. Our Delegates not attending the last Cession, We have had no Convenient Conveyance to your Excellency, otherwise we should
 (69) have answered your Letter Earlier, and which for the above reason has had no bad effect, the officers all being Commissioned by the County Lieutenant and Qualified before the arrival of your Excellency's Letter. We are to acknowledge the receipt of the Captains and Subaltrons Commissions which we delivered to the County Lieutenant, who detained Captain James Scott and Subaltrons Commissions untill yesterday, which was then Delivered and Sworn to.

Matthew Ritchie Gentleman high Sheriff Protest against the sufficiency of the Goal to retain Prisoners.

Ordered That John Cannon and Richard Yeates Gentlemen, Inspect the Clerks Office of this County, and report to next Court the Condition in which they find the Papers and Records.

Ordered that Mary the wife of Alexander McAdams a poor Soldier in the Continental Service be allowed 20 S. p. month, for her Support, to Commence the 25th of May last, and be Continued to the 25th of September next.

John Spivy, Plaintiff

v

Case.

Samuel Beeler Def'd. At Request of Parties Ordered That this Suit be refered to Samuel Johnston, James Scott, David Andrey and George Long, and that they report their Opinion to the Next Court.

(70) Ordered that Jedeah Ashcroft be appointed Constable the Ensuing year and that he be Sommoned before Oliver Miller Gentl. to Qualify into said Office.

Ordered that Court be adjourned untill Court in Course.

JOHN CANON.

At a Court Continued and held for Yohogania County September the 28th, 1778.

Present Isaac Cox, Benjamin Frye, Joshua Wright, Joseph Beckett, Gentleman Justices.

Administration of the Estate of Thomas Cook deceased is granted to Anne Cook widow of sd. Deceased she having complied with the Law.

Ordered that Nathaniel Blackmore, John Munn, John McDowel and James Allison or any three of them being first Sworn do appraise the personal Estate and Slaves if Any of Thomas Cook deceased, and make return to Next Court.

Administration of the Estate of Archibald Wilson deceased is granted to Elizabeth Wilson his widow she having Complied with the Law.

Ordered that Thomas Jackson, Andrew Pow,¹ John Rogers & Michael Dellow Sen. or any three of them being first Sworn do Appraise the Personal Estate and Slaves if any of Archibald Wilson deceased and make return to next Court.

Andrew Pow Produced a Commission from his Excellency the Governor Appointing him Lieut. of the Melitia which was read and Sworn to accordingly.

(71) George Brent & Phil Pendleton Sworn Atto.

John White Ju. Took the Oath of Lieut. of Melitia.

Deed Pool Andrew McMeans to Thomas Applegate was acknowledged by sd. McMeans party thereto and Ordered to be recorded.

Hugh Brawdy Plaintiff

v

Jacob Feagley Defendt. Award returned & Judgment.

James Johnston v Godfrey Wagoneer. Award returned & Judmt.

On the motion of John Johnston, Ordered that his mark a Swolefork in each ear be recorded.

Samuel Newel Gentlement Present.

View of a Road from the Road leading from Gist to Devoirs Ferry Crossing the River opposite the mouth of Mingo Creek from thence to Fromans Mill on a Branch of sd. Creek, Returned by the Viewers, Ordered to be set aside. Ordered that Michael Humble, Daniel Applegate, James Colven & Hugh

¹This was undoubtedly the celebrated Andrew Poe, Indian fighter.

Brawdy or any three of them being first Sworn review said Road ; and make return to next Court, sd Road.

Ordered that an order for a View of a Road from Fromans Mill to the road Leading from the Court House to Pentecosts Mill be set aside. ¶

Ordered that Henry Newkirk, John Lewis, John Morrison, and Henry Morrison, or any three of them being first Sworn view a road the Nearest and Best way from Fromans Mill on Mingo Creek into the Road leading from the Court House to Pentecosts Mills between the Plantations of Joshua Wright and John Johnston and make report of the Conveniency and Inconveniency to Next Court.

(72) Isaac Cox Gentlemen. Absent.

Ordered that the administration of the Estate of Daniel Greathouse deceased formerly granted to John Greathouse be revoked and that the same be granted to Mary Greathouse the widow of the said Deceased, she having complied with the Law. Ordered that Edmond Polk, James Campbell Richard Boyce, & Richard Elson or any three of them being first Sworn do appraise the Personal Estate and Slaves if any of the Estate of Daniel Greathouse deceased and make return to Next Court.

Ordered that Court be adjourned untill Tomorrow morning 7 oclock.

SAMUEL NEWELL.

At a Court Continued and held for Yohogania County September 29th, 1778.

Present Isaac Cox Samuel Newell Benjamin Frye Oliver Miller Joseph Becket Gentlemen Justices.

Atteachments.

Clerk v Poston Contd.

O'hara v Brandon, Cont'd.

Cumings v Lindsey Cont'd.

Grayham v Strain Contd.

Issues.

Cox v Williams &c. Contd.

Lydea v Cox Contd.

References.

Connel v Vaughan Abates P. Dead.

v Wells Contd.

- (73) Washington v Martin Contd.
Ward v Dunn Contd
Ward v Wells Contd.
Priscoe v Todd Contd.
Connel v Lindsey Contd.
Reasoner v Ruth Contd.
Brown v Hamelton Contd.
Summervill v Summervill Contd.
Bowling v Morrison Contd.
Summitt v Gollihar and wife Dismd. & P.
Stirling v Richards. Contd.
Wells v Newell Contd.
Vance v Williams Contd.
Brashers v Hamelton Contd.
Cook v Ferrell Abates by Plaintiffs Death.
Gist v Waller Contd.
 v Hull Contd.
 v Boyles Contd.
Cook v Thomas Abates by P. Death.
Burriss v Tropman Contd.
Hull v Bandfeeld. Contd
Wherry v White Sen. Contd. at Issue.
Burriss v Johnston &c. Contd.
Dunnaughagain v Gray. Contd.
Byers v Patterson. Agreed.
Pentecost v McDonald. Agreed.
Shilling v Collingo. Contd.
Schley v McKindley Contd.
Shilling v Newkirk Contd.
 v the same Contd.
Wills v Shilling. Agreed
Braydon v Vannatree Contd.
Cox v Williams &c Contd
Pentecost v Long. Agreed.
Myers v Hooper Contd.
Mitchell v the same Contd.
Richards v Ross Contd.
Fullum v Johnston &c. Contd.
 v the same Contd.

- v McCormish. Contd.
 Andrews v Johnston & Co. Contd.
 Shilling v Forner. Contd.
 Hooper v Myers. Contd.
 v George Miers. Contd.
 Brounfeld v Ross. Contd.
 Holms v Dunn. Contd.
 Kester v Long Jr. Contd.
 Fullum v Johnston. Contd.
 Hooper v Thomas & Co. Contd.
 Vance v Williams. Contd.
 Fullum v Johnston. Contd.
 Springer v Ketsey. S. Impr.
 Swislocks v Jones. Contd.
 Froman v McCrouy. Contd.
 Decker v Ruth. Contd.
 Pearce v Ewins. Contd.
 Murphey v Richards. Contd.
 Hays v Deale. Contd.
 Bruce v Pelton. Contd.
 Ewalt v McCallister. Contd.
 Hogland v Riggie. Contd.
 v Laughlin. Contd.
 Swislocks v Swislocks. Contd.
 Newkirk v Shillings. Contd.
 McFarling v Beeler. Contd.
 Andrews v Johnston. Cont.
 Matthews v Hibbitt. Contd.
 How v Geneway & Co. Contd.
 Cox v Britzman. Contd.
 Vannatree v Braydon. Contd.
 v Perkerson. Contd.
 Colwell v Frye & Co. Contd.
 Henderson v Kincaid. Contd.
 Vannatree v Kuykenhall. Contd.
 Burris v Williams. Contd.
 Jones v McDonald. Contd.
 Dawson v Kirkpatrick. Contd.
 Morrison v Vannatree. Contd.

- (75) Hall v Wells Contd.
 Grayham v Logan Contd.
 Beeler v Walker Contd.
 Woods v McKee Contd.
 Morrison v Surgest Contd.
 Froman v Boyce Contd.

Common Orders.

- Lindsey v Long Contd.
 Spivy v Beeler Judgt. Wt. Enqy.
 Nelson v Shilling Judgmt. Wt. Enqy.
 Shilling v Nelson. Judt. Wt. Enqy.
 Lawrence v Rogers. Judgt. Wt. Enqy.

Appearances.

- Colwell v Wray. A C
 Mattocks v Brown. A C
 Williams v Garby Agreed.
 Deal v Hays Contd.
 Crooks v Hogland Contd.
 Patterson v McCornish Contd.
 v Emberson Agreed.
 McKay v Davidson) Contd.
 v the same)
 Brown v Mattocks A C
 Morrison v Vannatree Contd.
 Bouseman v McGoldrick Contd.
 Myers v Hooper Dismissed P R.
 Willson v Richards Contd.
 Ralston v Lowry Contd.
 Pearce v Evins. Contd.
 Commingo v Boggs A. C.
 Kinkaid v Henderson &c. Contd
 v Henderson. Contd.
 Martin v Shillings Discont.
 McDonald v Slover A. C.
 Hogland v McNew Alia.
 (76) Springer vs. Listenet & ux. Agd.
 Same vs. Same Agd.

- Lochran vs. Brown Alias.
 Lydia vs Collins Alias
 Colwell vs Thorn Alias.
 vs. Hoagland. Alias.
 Witzle vs McIlwaine. Alias.
 Winebiddle vs. Valentine. Alias.
 Pearce vs Evans Alias
 Lebat vs Smith & ux Alias
 Allason vs Douglas Discontd.
 Lintenberger vs Oldcraft. Alias
 Lindsey vs Hamilton Alias.
 vs Smith Alias.
 Wells, Infant &c. vs. Blackstone. Alias.
 McIlwaine vs Witzle & ux Alias
 Valaudingham vs Walker Alias
 Wagoner vs Rape Alias.
 Barrackman vs Woods Alias.
 vs Harry Alias.
 Miller vs Mitchell Alias
 vs Same Alias
 Harrison vs Hall Alias.
 Beans vs Johnston Alias.
 Witzle vs Crawford Alias
 Brashers Admr. vs Colvin Alias.
 vs Brasheirs Alias.
 McCullum vs Brazier & Adm. Alias
 Burns vs Louthierback Alias.
 Sumrell &c vs Sumrell Alias.
 Colwell vs Young & al Alias.
 Listenet Inf. &c. vs Springer Alias.
 Gallahier & ux vs Summitt Contd.
 Froman vs Dean Contd.
 Cook vs Dickenson. abates by Pltff's Death.
 Riggs vs Corn Plurias
 Thompson vs Carpenter Agd.
 Brashairs vs. Hamilton Discontd. P. No Int.
 White vs. Johnston Contd
 Campble vs Patterson Plurias.
 Miller v McGowen. D. Contd.

Burris v Jones Discontd.
 Colwell v Mills Plurias
 Wallace v Dunkin Contd.
 Schley v McKindley Alias.
 Boyce v Froman &c. Contd.
 Tygert v Bowley Contd.
 v Chamberlain }
 v Davidson } Contd.
 Swigert v Murphey Contd.
 Davis v Pelton Contd.
 McCullum v Gilyard Contd.
 Lessee Clerk v Again Contd.
 Springer v Lestnett. Contd.
 How v Geneway Plurias.

Petitions

Todd v Shearer A. S.
 Hufman v Williams A. S.
 Timmons v Gaffney A. S.
 Wright Asse. v Dunleavy Contd.
 Morgan v Stalsman A. S.
 Dunleavy v Frye Contd.
 Swigert v Ross A. S.
 Baggs v Commingo A. S.
 Devoir v Anderson. Contd.
 Whitzle v Valentine A. S.

District Causes.

Miller v Humble Ejmt. Contd.
 Pentecost v Jones &c. Contd.
 v Linn. Contd.
 Johnston v Swarengen. Contd.
 Brounlee v Dugloss Contd.
 Brent v Scott } Dis. Contd.
 v the same } “
 v the same } “

- (78) Last Will and Testament of Abraham Vaughan deceased was proved by the Oaths of Thomas Gist & Edward Hattfield Subscribing Witnesses & O R.

Richard Vaughan, & Andrew Pow Sworn Executors of the Last Will and Testament of Abraham Vaughan deceas'd. Ordered that Stephen Ritchards, Adam Pow, Thomas Jackson & Joseph Jackson, being first Sworn do appraise the Estate of Abram Vaughan deceased and make return to next Court.

Ordered that the Tithables within five miles of the South side of the road of which Nicholas Christ is Surveyor work on and keep said Road in Repair.

License is granted James Johnston to Keep an Ordinary at the Court House of this County, he having Complied.

Benjamin Kerkindall Present.

Robert Louden is appointed Guardian Elizabeth Loudoun, Thomas Loudoun, Easther Loudoun, Catherine Loudoun, John Loudun, James Louden, Mary Loudoun, Orphans to James Lowden deceased, he having Complied with the Law.

Ordered that Matthew Ritchie Gentleman be appointed Sheriff for the Ensuing Month and that he be sworn accordingly.

Matthew Ritchie Gent. Sworn Sheriff for one month.

Ordered that the Sheriff Sommon a Grand Jury to attend next November Court.

David Philips is appointed Constable the Ensuing year and that he be sommoned before Oliver Miller Gentl. to Qualify into said Office.

(78) Ordered that Nicholas Depugh, Benjamin Kaster be appointed Constables the Ensuing year, and that they be Sommoned to Swear into Said Office.

Ordered that Atteachment Issue against Samuel Devoir for not Taking on himself the Office of Constable.

Edward Ward Gent. named in the Commission of the piece and Commission of Oyer and Terminer come into Court and Took the Oath of Justices of Piece and Justice of Oyer and Terminer.

Ordered that Anne McClain be sommoned to shew cause why her Daughter Anne Jefferess, Should not be Bound to Samuel Semple, agreable to the Tenner of a Contract Between the said Ann and Sarah Semple wife of the said Samuel in the year 1770.

Simmon & Campbell

y

Attachment.

Croghan —

Ordered that Judgment be set aside

Garnishee and redocked.

David Dunking having formerly declared, that he had in his hands one hundred Seventy Nine and three forth Dollars the Property of the Defdt. William Christie, two pair of Geers, one old Ax, one old Spade, a pitchfork, a Small Box of Iron & on old Lanthorn. George Lentinburgher That he had a Wheat fan, the property of the Defdt. Money condemned in the hands of Garneshee. Judgm't according to former Judgment, and Order of Sale.

Bill of Sale Sarah Reed to Robert Blakely and John Reed
was proved by the oath of Edwd. Cook one of the Subscribing
Witnesses & O. R.

(79) Edward Ward Gentleman Present.

Joseph Brouster & Jacob Bouseman & Malechia Hays come into Court and did acknowledge to Owe to Patrick Henry Esq. Gov. or Chief Majestrate of this Commonwealth or his Successor in Office Vizt. the said Joseph Brouster in the sum of five hundred pounds, and the said Jacob Bouseman and Malichi Hays in the Sum of two Hundred and fifty pounds each, to be levied on their respective goods & Chattles Lands and Tenements, Conditioned for the Personal Appearance of the said Joseph Brouster at the Next Grand Jury Court to be held for this County and then and there answer to Such Objections as shall be alledged against him Touching his being concerned in the Late Conspiracy for Taking the Garrison of Pitt, and not depart the Court without Leave otherwise to remain in full force & Virtue.

Ordered that the allowance made to the wife of Daniel McKay a poor Soldier Shall commence the 25th of May Last and Continue to the 25th of the Present Month.

Ordered that Colo. John Campbell pay to the respective Soldiers wives & widows the money remaining in his hands due them up to the 25th of the Present Month.

Ordered that the Clerk perfer a Petition to the Assembly setting forth, that the Court Conceives the Laying a County Levy to defray the Necessary Expence of the County, in the

administration of Justice, will from the Peticular Situation of the County be attended with difficulty, and praying that it may be Enacted to enable the Court to receive and apply the fines, accruing in the County towards Lessing the County-Levy.

Ordered that Court be adjourned untill Court in Course.

BENJA. KUYKENDALL.

- (81) At a Court Continued and held for Yohogania County October the 26th, 1778.

Present. Edward Ward Benjamin Kuykendall, Oliver Miller William Harrison, Samuel Newell. Gentlemen Justices.

Archibald Hull v Thomas Bonfied. At Request of party ordered to be refered to George Cox & John Jackson, Jas. Innis & John Decker.

Richard Beall Sworn Lieut. of Melitia.

Inventory of the Estate of Benjamin Bruer deceas'd. Returned by the Appraisers and Ordered to be Recorded.

Inventory of the Estate of Jonathan Higgs deceased Returned by the appraisers and Ordered to be Rec'd.

Matthew Ricthie is appointed Sheriff for one month who was sworn accordingly.

John Southerlin Sworn Deputy Sheriff for one month.

The last will and Testament of John Pearce deceased was proved by the Oath of Moses Cox and Dorsey Pentecost two of the Subscribing Witnesses, and Ordered to be Recorded.

Inventory of the Estate of Samuel Ketcham deceased, returned by the appraisers and Ordered to be Recorded.

Ordered that Court be adjourned untill Tomorrow Morning 7 Oclock

EDWD. WARD.

- (82) At a Court Continued and held for Yohogania County October 27th, 1778.

Present Edward Ward Benjamin Kuykendall, Oliver Miller, Samuel Newell, William Harrison, James Rogers Gentlemen Justices.

Ordered that the Ordinary Keepers within this County be allowed to sell at the following rates —

Whiskie by the half pint..... 2S.

The same made into Toddy..... 2S.6.

for a Greater or Lesser Quantity in the same proportion

Beer p Quart 1S6

the same proportion for a Larger or Lesser

Quantity.....

for a hot Breakfast..... 3S

for a Cold ditto..... 2S6

for a Dinner..... 4S.

for a Supper..... 3S.

for Lodging with Clean Sheats..... 1S6

Stablage with good hay or fodder..... 5S.

Corn p. Quart 9d

Oats p. Quart..... 6d

Inventory of the Estate of Daniel Greathouse deceased
Returned by the administrator and Ordered to be recorded.

Richard Crooks and Nathaniel Brackmore is Recommended
to the Governor as proper persons to Serve as Captains of the
Melitia.

(83) James Burriss & John Roadharmill be recommended to the
Governour as proper Persons to Serve as Lieutenants of the
Melitia.

James Guffee is recommended to the Governour as Proper
Person to Serve as Ensign of the Melitia.

Michael Tygert, Samuel McAdams, John Shannon, James
Morrison Ju. & Francis Morrison is recommended to the
Governour as proper persons to Serve as Lieutenants of Melitia.

Jacob Long Jun. & Moses Cooe are Recommended to the
Governour as proper Persons to Serve as Ensigns of the Melitia.

On the Motion of Colo. John Campbelle License is granted
him to Build and Compleat a Water Mill on Campbell's Run
emptying into Churtees Creek on the West side, a short distance
below Robertson's Run.¹ It being made appear in this Court
that the Building Said Mill will effect the property of no Per-
son, the Lands on both sides being the Property of the said
Campbell.

Ordered that Court be adjourned to Court in Course.

EDWD. WARD.

¹ Now Known as Robinson's Run, emptying into the Chartiers at the Borough of
Carnegie.

- (84) At a Court held for Yohogania County November the 23rd. 1778.

Present Edward Ward, Isaac Cox, Joshua Wright, & James Rogers, Gentlemen Justices.

Ordered that Colo. John Campbell have leave to Build a Mill on Churteers Creek near the mouth of Robertson's Run. It appearing by the Return of a Jury for that Purpose that It will effect no Person, and that the said Report be recorded.

Nicholas Dawson Sworn Captain of the Militia.

Deed poll Wm. Price to William Harrison acknowledged by the sd. Price party thereto and Ordered to be recorded.

Deed poll Daniel Casity to Edward Griffith Proved by William Price one of the Subscribing Witness. Ordered to Lie for farther Proof.

Deed Poll William Shannon to James Miller acknowledged by said Shannon and Ordered to be recorded.

- (85) Ordered that Samuel Johnston, Ritchard Boyce, James Campbell, Alexander McKendless, Peter Rowleter, William Christie, John Ormsby, Nathaniel Tumbleson, Edmond Polke, Richard Wells, Joseph Noble, James Allison, Laurence Crow, Nicholas Little & Susbalze Bently, be fined agreeable to Law for non attendance as Grand-Jury Men.

John Lydea v W^m. Collings & Zebulon Collins. Spl. Bail.

Ordered that the Court be adjourned untill Tomorrow Morning 9 oclock.

EDWD. WARD.

At a Court Continued and held for Yohogania County November 24th 1778.

Present: Edward Ward Isaac Cox, Samuel Newell, Oliver Miller, Gentlemen Justices.

Administration of the Estate Geo. Rineheart is granted to Mark Iler he having Complied with the Law.

Ordered that Richard Waller, Joseph Waller, Edward Hatfield & Augustus More or any three of them being Sworn do appraise the Estate of Geo. Rineheart deceased and Make report to Next Court.

Archibald Hull agt. Thomas Bondfield, Awd. Returned and Judgment.

License is granted John Collings to keep a Ordinary at his House he having Complied with the Law.

Administration of the Estate of John Green deceased is granted to William Colvin he having complied with the Law.

- (86) Ordered that Thomas Brown, Bazel Brown, Benjamin Brashers & Otho Brashers do appraise the above Estate and make report to next Court.

Administrater of the Estate of John McClery is granted to William McClery he having complied with the Law. Ordered that John Reed, Robert Thompson, Joseph McGarman & Mabary Evins or any three of them being first Sworn do appraise the above Estate and make report to next Court.

Inventory of the Estate of John Mills deceased returned by the appraisers and Ordered to be recorded.

Joseph Brown v Tobias Mallocks, Samuel Dunn. Sp. Bail.

Samuel Holcross v Samuel Dunn. Tobias Mallocks Spl. Bail.

Com. Wealth

v for Disaffection to the State.

John Brouster. The said Brouster being brought into Court and nothing appearing against him Ordered to be Discharged.

Deed Poll Walter Grayham to Thomas Christie was proved by the Oath of Jacob Bouseman one of the Subscribing Witnesses, and Ordered to Lie for farther proof.

Inventory of the Estate of John McCay deceased returned and ordered to be recorded.

Joshua Wright Genl. Present.

John Hall being bound in recognizance who being called failing to appear. Ordered that a Scerafacis Issue.

License is granted to John Roberts to keep an Ordinary at his House he having Complied With the Law.

- (87) Ordered that Edward Hatfield, Christopher Price, John Beason and Henry Beason or any three of them being first Sworn do appraise the Estate of Abraham Vaughan deceased, and make return to next Court.

Lapsley vs Reed. Ordered that a Commission Issue to Take Depositions in said Suit.

Edwd. Ward. Genl. Absent.

Ward v Thorn. Ordered that a Commission Issue to Take Depositions in said Suit.

Ruburn vs. Laferty. No Inhabitant. Dism'd.

Ordered that the Administrators of the Estate of Frederick Farree be Summoned to render acct. of said Estate to next Court.

Attachments

Ohara vs Brannon. Contd.

Cummings vs Lindsey. Contd.

Grayham vs Strain Abates. Def. Dead.

Issues.

Cox vs Williams Contd def.

Lydia vs Cox. Contd Ptf.

Wherry vs White. Contd PLf.

Miller vs Humble Contd PLf.

Pentecost vs Jones Contd Deft.

Johnston vs Swearengen Contd.

Brounlee vs. Douglas. Contd.

References.

Connell vs Wells Contd.

Washington vs Martin C. O. Eject.

Ward vs Dunn dismiss. by PLf.

vs Wells Contd.

Briscoe vs Todd Contd.

Connell vs Lindsey. Contd.

Reasner vs Ruth. Contd.

Broun vs Hambleton. Contd.

(88) Sunrell vs Sunrell, Contd

Bowling vs Morrison. Contd.

Sterling vs Richards Contd.

Wells vs Newell. Contd.

Vance vs Williams C. O. Eject.

Basheirs vs Hambleton Contd.

Guest vs Waller. Contd.

vs Hull Contd.

vs Boyles Do.

Burris vs Trapman. Contd.

vs Johnston Contd.

Donnagen vs Gray Contd.

Shilling vs Collins. Contd.
 Sly vs McKinley. Contd.
 Shilling vs Newkirk N. G. Agd.
 vs Same Owe Nothing. Agd.
 Braden vs Vanatre. Contd.
 Cox vs Williams Contd Def.
 Myers vs Hooper N. G. with Leave. Agd.
 Mitchell vs Same N. G. do.
 Richards vs Ross. Contd.
 Fullum vs Johnston & at Contd. def.
 vs Same Do.
 vs Jno. McCornish Do.
 Andrews vs Same Contd Def.
 Shilling vs Faulkner. N. G. with Leave Agd.
 Hooper vs Myers N. G. with Leave. Agd.
 vs G. Myers Do.
 Brounfield vs Ross Contd
 Custard vs Long Contd
 Hooper vs Myers N. G. With Leave Agd.
 Vance vs Williams. Contd Def.
 Fullum vs Johnston N. G. w. Leave Agd.
 Springer vs Kerny N. G. with Leave Agd.
 Swassicks vs Jones Contd
 Froman vs McCrory Judg. by Nihil dicet.
 Decker vs Ruth Contd
 Pearce vs Evans Contd.

- (89) [Patrick Clerk having Obtained an Attachment against the Estate of William Poston for £4.18.4 Penn'a Currency who is said to be so obsconded that the Ordinary Process of Law cannot be served upon him, and the Sheriff returned that he had levied the said Attachment in the hands of Anthony Corkhern, and that the said Anthony confes'd that he had £16.10 Penn'a. Currency, Property of Plaintiff, and the Plaintiff produced a proved account agt. the sd Defendant for £4.18.4 Pennsylvania Currency. It is considered by the Court that the Plaintiff recd. agt. the Defdt. £.3.18.6. with costs. Ordered that the Money be Cond. in the hands of Garneshee.]¹

¹ Erased in the original.

- Murphy vs Richards. Contd.
 Hay vs Dean do
 Bruce vs Felton do
 Evalt vs McCallister do
 Hoagland vs Riggle do
 vs Laughlin do
 Swassick Adr. vs Swassicks. do Eject.
 Newkirk vs Shilling. Conditions perfd. Contd.
 Mcfarland vs Beelor. Contd.
 Andrew vs Johnson. Contd.
 Matthews vs Hibett. Contd.
 Howe vs Jenniway. Contd.
 Cox vs Bretsman. Contd.
 Vanatre vs Braden. Contd.
 vs Parkison. Contd.
 Colwell vs Fry C. O.
 Henderson vs Kinkade. C. O.
 Vanatre vs Kuykendal. Contd.
 Burriss vs Williams. Contd.
 Jones vs McDonald. do
 Dawson vs Kirkpatrick. Contd.
 Morrison vs Vanatre. C. O.
 Hall vs Wells &c. Contd.
 (90) Grayham vs Logan Contd.
 Beeler vs Walker. Contd.
 Woods vs McKey. Con'd.
 Morrison vs Swygart. Contd.
 Froman vs Boyer C. O.
 Deal vs Hays. Contd Plf.
 Crookes vs Hougland. Contd.
 Patterson vs McCornish. Contd.
 Morrison vs Vanatre. C. O. Eject.
 Bousman vs McGoldrick C. O.
 Myers vs Hooper. C. Rule. N. G.
 Willson vs Richards N. G.
 Rolstone vs Lowry. Contd.
 Pearce vs Evans. Contd
 Gallahar vs Summitt. discontd.
 Froman vs Deane. C. O.

White, Sen. vs. Johnson. C. O.

Wallice vs Duncan. Contd.

Sly vs McKenly. Contd.

Boyce v Froman &c. Contd. Ptff.

Tygart vs Boley. Contd.

vs Chamberlane. Contd.

vs Davis. Contd.

Swygart vs Murphy. C. O.

Devoir vs Pelton. Contd.

McCullum vs Galliard. Dism. with Costs.

Clark vs Again. Contd.

Springer vs Listenett. Contd.

McCoy vs Davison. Contd.

vs Same do

C. Orders.

Lindsey vs Long

Spivy vs Beelor. Contd.

Nelson vs. Shilling. Contd

Shilling vs. Nelson do.

Lawrence vs Rogers do.

- (91) Ordered that a request be made to the Court of Monaugohela to appoint Two Gentlemen to meet Rich'd. Yeates and Isaac Leet Jun. appointed by this Court as Commissioners to ascertain Dunlaps old road from Redstone old Fort to Bradocks road as the Boundry Line between this County and the sd County of Monaugohela agreeable to Act of Assembly.

Alias Capias.

Colwell v Wray. Plu. Cap.

Mallocks vs Brown. Contd.

Brown vs Mallocks. Contd.

Kinkaid vs Robert Henderson. Contd.

Cumings vs Baggs. Contd

Kinkaid v Henderson. Contd.

McDonald v Slover. Contd.

Hazle v McNew. Contd.

Laughlin v Brown. Contd.

Colwell v Thorn. Plu. Cap.

v Hogland. Con.

- Whitzle v McIlwane Contd.
Winebiddle v Valentine Contd.
Pearce v Evins Contd.
Labatt v Smith Contd.
Lentenburger vs Oldcrof. Contd.
Lindsey v Hamilton Contd.
v Smith Contd.
Wells Inf. v Blackson Contd.
McInwane v Whitzle Contd.
Valaningham v Walker Contd.
Wagoneer v Rape Contd.
Barrackman vs Woods Contd.
v Havig Contd.
Miller v Mitchell Contd.
v the same Contd.
(92) Harrison v Hall Contd.
Beans vs Johnston Contd.
Whitzle vs Crawford. Contd.
Brashers adm. vs Colvin C. O.
v Brashers C. O.
McCullum vs Brashers. Contd.
Burns &c v Loutherback Contd.
Sumrall &c v Sumrall Contd.
Colwell v Young N. G.
Lestnett Inf &c. v Springer Contd.
Riggs v Corn Contd.
Campbell v Patterson. Contd.
Schley v McKindley. Contd.
How v Geneway. Contd.
Colwell v Mills. Contd.
Appearances.
Henderson v Walson Dis. by Plaintiff.
Collings vs Vannatree. Contd.
Williams, Ass. vs Anderson Contd.
Tharp v Gray Contd.
v Matthews Contd.
Frye v Richie. Contd.
Murphey v Jourden. Contd.
v the same Contd.

- Heath v Bruce Impl.
 Brooks Adm. v Roberts. Contd.
 Smith v Gibson Alias Cap.
 Henry v Slone C. O.
 Miller v Humble Alias Cap.
 Henderson v Johnston Send out another Ejmt.
 Froman v Boyce. Ejmt. Send out a new Process.
 Johnston v Stephens Contd.
 v the same Contd.
 Reed v the same Contd.
 Wright v Heart. Contd.
 Boothe v Shuster Dism. by Plff.
 (93) Kearns vs Loggan. Alias Cap.
 Springer vs Walker. Alias Cap.
 Hamelton vs Norris
 vs Brashers. }
 vs Brashers Sen. } Ejm. Issue New Process.
 Gallihair vs Tracy. Disctd.
 M^cCarmeck vs Willson. Contd.
 Munn vs Crawford. Contd.
 M^cMahen vs Matthews. Alis Cap.
 vs Honks Alias Cap.

Ordered that Colo. Isaac Cox be Impowered to acct with all person that hath Negotiated any Business relative to this County's Salt, Lodged with Israel Thompson of Louden County, and that he receive the remainder of said Salt, and Transport it to this County, and Issue the same to the Inhabitants to whome it is due, at Six pounds, Ten Shillings pr. Bushell, and that the profits thereon shall be his full satisfaction for his said Services and that the said Colo. Cox shall also pay all demands on said salt Either for the original purchase or otherwise.

Ordered that Philip Pendleton be allowed one Hundred pounds pr annum for his Services as the State Attorney.

The Court then proceeded to lay the County Levy.

Dr. the County of Yohogania.

To Philip Pendleton as States Attorney £100.

To Richard Yeates for Running County Line 31

	To Isaac Leet Jun.	Do.	36
	To Dorsey Pentecorst for Attending pr. Acct.		14. 18
			<hr/> £181. 18
	Levy Continued.		
(94)	Dr. Brought Over		£181. 18
	Cr. By 910 Tithables @ 12 S. Each		546.—
			<hr/> 364. 2
	Dr. to the Sheriff for collecting £546 at 6 pr C.		32. 15. 2
			<hr/> £331. 6. 2
	To the sheriff for Extra Services 1200 & Tob'o.		7. 10
			<hr/> £333. 16. 10.
	Depositem in Sheriffs hands		

Ordered that the sheriff Collect from every Tithable person within this County the sum of Twelve Shillings each as a County Levy, and that he pay the above Charges to the different persons to whome they are due, and that he account for the above Collections.

Ordered that Benjamin Kuykindall, and Samuel Newell Gentlemen, Contract with a proper person or persons To Junk and Daub the Coort house, and provide Locks and Bars for the Doors of the Goal, and to Build an addition to the Ednd of the Court House and Goal Sixteen feet squire one Story High with good Sufficient Logs and a good Cabbin Roof, with a good outside wooden Chimney, with Convenient Seats for the Court, and bar, with a Sheriffs Box &c. with a good Iron pipe stove for the Goal Room, and that they have a pair of stocks, whipping post and Pilliory Erected In the Court yard, and that the whole be Completed as soon as Possible.

Ordered that Henry Taylor, James Allison, James Patterson and William Brashers be attached for Contempt in Neglecting to make report of the Conveniency and Inconveniency of a Road from Catfish Campt to Pentecosts Mills, agreeable to a former Order of Court.

- (95) Ordered that Court be adjourned untill Tomorrow morning 9 oClock.

EDW^d. WARD.

At a Court Continued and held for Yohogania County
November 25th, 1778.

Present, Edward Ward. Isaac Cox, Joshua Wright Richard
Yeates and Samuel Newell Gentlemen Justices.

Attachments from the District Docket.

Anderson vs McLean. Contd.

McMahon vs Myers. Contd.

Campbell vs Street. Contd.

Morgain vs Connolly Contd.

Dunking & Wilson vs Linn Contd.

Price vs Linn Contd.

Hawkins vs Greathouse Abates by Def. Death.

Hull vs Linn. Contd.

New Attachments.

Pillon vs Smith Contd.

Hammill vs Hanks Contd.

Duglas vs Hill Discontd.

Vergin vs Carr Abates by Def. Death.

Perkerson vs Duglass Discontd.

Decker vs Hanks. Contd.

Bowling vs Rutter. Contd

{96} Conee vs Casteel Contd.

Robertson vs Frenuty Contd.

Smallman vs McConnell Contd.

Thomas vs Kilgore Discontd.

Perkerson vs Edwards Contd.

Ormsby vs Dunn Contd.

Harrison vs Wallace Discontd.

Ogle vs McSwan Contd.

Issues.

Spear vs Jones Contd.

Decamb vs Nicholas. Abates by Plant. Death.

vs the same Do.

McCawley vs Jones Contd.

Campbell vs McKay. Abates by Defd. Death.

Spears vs Winemiller Contd.

Semple vs Collings Contd.

- Cook vs Froman Contd.
 v Shilling Contd.
 vs McConnell Contd.
 vs Robertson Contd.
 Crow vs Williams Contd.
 Same v the same Contd.
 Same vs the same Contd.
 Sample vs McKinzey Contd.
 Heckman vs Dunkfield Contd.
 Rogers vs McKay. Abates by Defds. Death.
 Wilson vs Hannah Contd.
 Colvin vs Frederick Contd.
 (98) Holliday vs Hawkins Contd.
 Bowley vs Springer Contd.
 v Springer Contd.
 Cresep v Dooling }
 v Peters }
 v Teegarden } Abates by Plant. Death.
 v French }
 Bealle v Finn &c } Contd.
 v McMahon } Contd.
 Barrackman vs Mutzs Contd.
 Armstron vs Ownigs &c. Contd.
 Hamelton vs Dunfield Contd.
 Hand vs Whitaker Contd.
 Harrison vs Paul. Abates by Defds. Death.
 Neavill vs Gist Contd.
 Riley vs Hanna Contd.
 Cresip adm. vs Tegarden Abates by Plant. Death.
 Teagarden vs Hammon Contd.
 Cresip vs Swearengen Contd.
 Phelps vs McKay. Abates by Defd. Death.
 v Sample. Contd
 Campbell vs Bealle Contd
 Paul vs Smith Contd.
 McElroy vs Templin. Contd.
 v the same Contd.
 Kuykendall vs Ross Contd.

References Not at Issue.

- Frye vs Tilton Contd
 v the same Contd.
- Chamberlain vs Hanthorn Contd.
 the same Heckman } Abates by
 the same } Defds. Death.
- Ward vs Owings Jun. Disctd. Defd. paying cost.
 Spear vs Heckman. Abates by Defds. Death.
 vs Proctor Contd
 vs Humble. Abates by Defds Death.
- (99) Spear vs Gist Contd.
 Croghan vs Waugh Contd.
 Steenburgan vs Warbill. Abates by Defd. Death.
 Newell vs Robertson Contd.
 Kuykendal vs Hawkings Contd.
 Small vs Teagarden Abates by Def. Death.
 Sample & ux vs McKay. Abates by Def. Death.
 Shilling v Young Contd.
 v the same Contd
 v Dement Contd.
 vs Proctor Contd.
 Newell vs Wiseman Contd.
 Noble vs Chamberlain Contd
 v Shay &c Contd.
 Shilling vs. Martin Contd.
 Hawkins Ass. vs Hilderbrand Contd.
 Hawkins v the same Contd.
 v Tonee Contd.
 v Hanks Contd.
 v White Contd.
 Hardin vs Hawkins Contd.
 Wm. Hardin vs Glen Abates Defd. Dead.
 Spears vs Crawford Abates by Defd. Death.
 v R. McMachen. Contd.
 Wickweze, Ass. v Harrison Contd.
 Prather vs Beaty Contd.
 Wells vs Brown Contd.
 Blackburn Ass. vs Peake Contd.
 Brashers vs Swearengen Contd.

- Vallandingham vs Chiswell Contd.
Chambers vs Amberson Contd.
Conrod vs Carter Contd.
Vannatree vs Kinkaid Dis Contd.
Heair vs McConnell. Contd.
Pentecost vs Trader Discontd.
Wood vs Griffith Contd
(100) Miseley vs Housesenger Contd.
Mitchell vs Scott. Contd.
Rogers vs Proctor Contd.
Avery vs Brown Contd.
Clinton & Noble vs Brashers Contd.
Baker vs Harges. Contd.
Wagler vs Warner Contd.
McGrue vs McConnell Contd.
vs Phelps. Contd
Glenn vs Henton. Abated. Plaintiff Dead.
Holliday vs Belleywiss. Con.
Boley vs Ross. Contd.
vs the same Contd.
vs the same Contd
Bouseman vs Douseman Contd.
v the same Contd.
v McLean Contd.
Kuykindall vs Dunn Contd.
vs Hawkins }
v Roberts } Contd.
v Smith }
v Vannatree }
McMahan v Irwin Contd
McKendless v McCornish. Contd
Taylor vs Irwin Contd.
Deining vs Lane Contd.
Moor vs Richman Contd.
Smallman vs Slover Contd
Deck vs Swearengen Continued.
Vergin v Moore Contd.
Barker vs Jourden Contd
Waller vs Meeks Contd

Cresip vs Bowling	} Abates by	
vs Wright		Plat.
vs Hedges		
vs Hanks		Death.
vs Reasoner		

Armstrong vs Rammage Contd.

Reasoner vs Heckman. Abates. Def. Dead.

Bedford Ass. vs Hill Contd.

Wilcox vs Creghead Contd

Barrackman vs Shousely. Contd.

Bealle vs Shawon Contd.

Keller vs Jones. Contd.

(101) Reasoner vs Shearer Contd.

Brent vs Beeler. Contd.

Ramsey vs Chambers Contd.

v the same Contd.

Stephens vs Berwick Contd.

Heath vs Farrer Contd.

Perkie vs Colloway Contd.

Cresip vs Shearer Contd

Hughes vs Thomas Contd.

Stephens vs Shilling Contd

Dye vs Dye Contd.

Downer vs Teegarden Contd.

Thomas vs Lee Contd.

Swagler vs Mills. Abates by Defd's. Death.

Virgin vs Carr. Abates by Defd's. Death.

Wilson vs Cockran. Contd.

Mills vs Hunter. Abates by Plant. Death.

Brounfield vs Cox. Contd.

Bond vs Long. Contd.

Tygert vs Dunnaughagain. Contd.

Colwell vs Brouster. Contd.

Sumrall vs. the same. Contd.

Shearer vs Miller Contd.

Baker vs Hendericks. Contd.

Whitaker vs Dickson Contd.

Wills vs Raredin Contd.

Whitzle vs Shearer Contd.

Stevens vs Stout. Contd.
Gallehan vs Dowling. Contd.
McMullen & ux vs Dixerson Contd.
Jas. McMullen vs the same Contd.
Moore vs Virgin Contd.
vs Jer. [?] Virgin Contd.
Dodd vs Virgin Ctd.
vs Virgin. Contd.
Bayars vs Philips Contd.
Campbell vs Brounfield Contd.
(102) Harrison vs Corn Contd.
Warvill vs Parmour Contd.
Jones vs Clark Contd.
Phelps vs McGrue Contd.
Simmings vs Daughan Contd.
Small vs Gray Contd.
McMichael vs French Contd.
Pursell vs Gibson. Contd.
Railouson vs St Clair. Abates by Plantif Death.
Couswell vs Dunn. Contd.
Barr vs Clerk Contd.
Halfpenny vs Wetzel. Contd.
Hill vs Corn } Abates by Defds. Death.
vs The same }
Thomas vs Merchant Contd.
Farree vs Kincaid. Abates by Plaintiff's Death.
Park vs Cockron Contd.
Ireland vs Wilson. Contd.
Collings vs Brody Contd.
Black vs Dunleavey Contd.
Vaughan vs McMahan Contd.
Stephenson vs Roads Contd
Tedball vs Stoner Contd.
Anderson vs Denney Contd.
Stephenson vs Barnett Contd.
McClellan vs Gray Contd.
Schely vs Smith. Contd.
Young vs Jackman Contd.
Linn vs Tilton. Contd.

Martin vs Johnston Contd.
 Chambers vs McLean Contd.
 Jones vs St. Clair. Abates by Pl. Death.
 Reese vs Haymaker Contd.
 Altman vs Hanna & Irwin Contd.
 Cox vs Decker Contd.
 Furgurson vs Carrol Contd.
 Martin vs Glass Contd.

v Hamelton Contd.

Black vs Chamberlain Contd.

Mordecai vs Bond }
 v Knight } Contd

(103). Black vs Jolley Contd
 v Hanna. Contd.

Deed poll from Daniel Cassity to Lettis Griffith was proved by the oaths of Rich'd. Yeates and Daniel Curry two of the Subscribing witnesses and Ordered to be recorded.

George McCormick Gent. named in the Commission of the Piece and Commission of Oyer and Terminer sworn to said Commissions.

Tygert vs Burns wontd.

v Jefferess Contd.

Vaughan vs Elson Agreed.

Winebiddle vs French Contd.

Yough vs McCullough. Contd.

Grater vs Crawford. Abates by Defds. Death.

Swigert vs Clemens	} Abates by
vs Robertson	
vs Cox	} Pl. Death.
vs Walker	
vs Lucas	
vs Scott	
vs Cox	
vs Fisher	

Morrison vs Ross Contd.

Brounfield vs Smith Contd.

Hunter vs Jones. Contd.

Caswell vs Dunn Contd.

Wallace vs Moredock Contd.

Faset vs Meeks Contd

Campbell, Ass. vs Dunn Contd.

Ridgley vs Linn. Contd.

Morecroft vs Doling Contd.

Fleman vs Gibson Contd.

Dunfield vs Hickman

vs Russell

v Ross

vs Lindsey

vs Fositt

vs Peershover

} Contd.

Steel vs Johnston Contd.

v the same Contd.

Downer vs Morrison Contd.

(104) Woods vs McGlaughlin Contd.

Styger vs Smith Contd.

Elliott & ux. vs Martin. Contd.

vs Collings Contd.

Lynch, Infd. vs Laughlin Contd.

Semple vs Ferns, &c. Contd.

Williamson, Ass. v Mills. Abates by Pf. Death.

Gray vs Harrison Contd.

Croghan v Bowley

v McCollister

v Bouseman

v McKee

v Kuyendall.

v Ritchman

v Whitaker

v Whitaker

v Whitaker

v Kuyendall

v Frederick

v Rowleter

v M.Clean

v Bouseman

v Grimes

v M.C. Grue

v Trupe

	v Switzwicks		
	v Meeks	} Contd.	
	vs M ^c Manemy		
	v Druming		
	v Campbell		
	v Myers		
	v Gibson		
	v Weddle Sen.		
	v Beard.		
	v Mitchell		
	v Miller		
	v Ornsby		
	v Renno		
	v Elliott		
	v Price		
	v Lowden		
	v St. Clair		
	v R. Lowden.		
(105)	George Croghan v William Ramage.	} Contd.	
	v Henry.		Contd.
	v McCartney		
	v Thompson.		
	v Ross.		
	v Ross.		
	v Whitzle.		
	v Hunter		
	v Gibson.		
	v Grant		
	v Springer		
	v Conner		
	v Keezer		
	v Royall		
	v Davidson		
	v Elrod		
	v M ^c Connell		
	Sinkler vs Labatt.		Contd
	Ornsby v Bouseman.		Contd.
	Miller vs Humble		Contd.
	Clerk vs Tibott.		Contd

Continued.

Eagle vs Adams Contd.
 Whitaker vs Dickson Contd.
 Gerty vs Hanna. Contd.
 Gaughagain vs Smith Contd.
 Enock vs Teegarden Contd.
 Clinton vs Mays Contd.
 Hawkins vs Humble Contd.
 Nicholass vs Swissicks Contd.

Swigert vs Hatfield	}	Abates by Plt. Death.
vs Case		
vs Erskins		
v Smith		
v the same		
v Daviss		
v Sills		
vs Crosby		

Fife vs Holliday	}	Contd.
v Fife		
v Churchill		

(106) Fife v Fife Contd.

Hite v Morgan Contd
 v White Contd.
 v Evins. Contd.
 v Mynett. Contd.
 v Tearabaugh Contd.
 v the same Contd.

Hite v McCabe &c. Abates by Plat. Death.

Bruin v Fife	}	Contd.
v the s me		
v W. Fife		
v the same		

Dealton v Gruver	}	Contd.
v Matthias Stoner		

Hales v Roach Contd.

Morgan v Nicholas	}	Contd.
v Bond		
vs Chamberlain		
v Beavers		

Morgan v Wyer	}	Contd.
v the same		

- Kuykendall vs Pearceful }
 v Pancake } Contd.
 v Douthard }
 Williams v Vannatree } Contd.
 v Crow }
 Price v Linn }
 v Weddle } Contd.
 v Hanks }
 Gray v Peters } Contd.
 v Patten }
 Tygert vs Donnavan }
 v Craven }
 v Vanatree } Contd.
 v Craven }
 v Oglin }
 St. Clair vs Sill Cont.
 v Reuboarn. Abates by Def. Death.
 (107) McCullogh vs McCormick Continued.
 v Douthard. Contd.
 Elliott vs Gerty Contd.
 vs Brown. Abates by Deft. Death.
 Jones vs Wilson. Abates by Parties Death.
 Hawkins v Bell }
 v the same }
 v the same } Contd.
 v Gray }
 v Perkerson }
 Semple v E. Thompson Contd.
 Crisep, Ass. v Dunfield. Ab. by Pl's. Death.
 Mic'l. Crisep vs Elliott } Abs. by Pl. Death.
 v Taylor }
 Robertson vs Crow Contd.
 Shilling vs Newkirk Contd.
 Rogers vs Williams }
 vs Parr } Contd.
 v Tumbleson }
 Zane v Hawkins } Contd.
 v Drenning }
 Zane, Ass. v. Holdman Contd.

- Castleman vs Taboe Contd.
 Elliott Adm. vs Harges Contd.
 McMullin vs Dickerson Contd.
 Ross, Ass. v Cleman Contd.
 Atkenson v Mairs Discontd.
 Daviss v Dunn. Contd.
 Lyon v Dunkan Contd.
 Heizer vs Bruce Contd.
 Glaswell vs Kizeer Contd.
 McGlaughlin vs Young Contd.
 Anderson vs Reese Contd.
 Dunleavy, Ass. vs Frerell Contd.
 Hammon v Teegarden Contd.
 Armstrong vs Oharra Contd.
 Thomas, Ass. vs Stark Contd.
 (108) Ward vs Springsteen Contd.
 vs the same. Contd.
 v Labatt. Dismiss. by Plaintiff.
 Jones vs Evins. Contd.
 v the same }
 v M^c.Goldrick } Contd.
 v the same }
 Ogle v Wilson. Contd.
 v the same. Contd.
 Labatt v Rammage Contd.
 v Aston. Abates by Plfs. Death.
 Hamelton v Aston Abs. Plfs. Death.
 Hamelton v Goe Contd.
 Cleldenery vs Logan Contd.
 Nevill, Ass. vs Holliday. Contd.
 N. Nezer vs Davidson Contd.
 Kelso vs Pigget Contd.
 Allison v Lyon }
 v Duglass } Contd.
 Hilderbrand vs Hawkins }
 Ass. v Hanks } Contd.
 the same }
 Wallace vs Briscoe Contd.
 v the same Contd.

- Swearengen vs Spencer Contd.
 v the same Contd.
 Smith vs Smallman Contd.
 v Sly, & u. Contd
 Martin v Elliott Contd
 Brasher vs Cossick Contd
 Jones vs Ormsback. Contd.
 Waferds Exr. vs Cox &c. Contd.
 Heath vs Parks. Contd.
 Hawkins vs McCarty Contd.
 Rootes vs Cooch. Contd.
 Spencer vs Swearingen Contd
 Brent vs Jones
 Colwell, Ass. vs Linn Contd.
 (109) Kid ——— v McConnel. Contd
 Theobald v Martin. Abs. by P. Death.
 Lynch vs Jones Contd.
 v Berwick Contd.
 Mitchell v Zane, Contd.
 Drening vs Boys Contd.
 Braden v Elliott Contd
 Johnston v Stell Contd.
 Crooks vs Hilderbrand Contd.
 Holliday, Ass. vs Wortherington Contd.
 Hamelton vs Martin. Con.
 Berwick v Atkinson Contd
 Gilfillin, Ass. v Tygert Contd
 McQuitly vs Gray. Contd
 McCollister vs Scott. Contd
 Bowler vs Tygert Contd
 Robertson vs McGoldrick Contd.
 McElroy vs McMachen Contd
 Atkinson vs White Contd.
 Dunleavy vs Russell. Dismsd. by Plaintiff.
 Schley vs Smith. Contd.
 Ferrell, Ass. vs Carr &c. Abs. by D. Death.
 Price vs Crawford. Contd.
 Wheat vs Kermicheall Contd.
 Scott vs Vallandingham Contd.

- Campbell vs Hanks. Contd.
Holliday vs Scott & ux Contd.
McCarty vs Craighead Contd.
Lyons vs Hamblebeerer Contd.
Frazier vs Chambers Contd.
Miller vs Hill Contd.
Kearns vs McQuing Contd.
Boyce v Thomas Contd.
Wright vs Springston Contd.
Davidson vs Hanks Contd.
Wothwall v Dristnell Contd.
(110) Clark vs Hawkins Contd.
Smith & Duglass vs Girty. Contd.
Dillo vs Perky^r. Contd.
McManamy v Oharra Contd.
Beckman v Scott. Contd.
Ferrell v Daugherty. Contd.
Tharp v Collings. Contd.
Armstrong vs Oharra Contd.
Bouseman v Ornsby. Contd.
Thomas vs Elliott Adm. Contd.
Christie v White. Contd.
Richards v Aston. Abates by D. Death.
Brinkers Exr. vs Hardin Adm. Contd.
Daviss & Co.'y. vs. Young. Contd.
Elevy vs Dunn Contd.
Lyons vs Downes. Contd
Mitchell vs. Wade Contd.
Willson vs McGinniss Contd
Downard vs Vaughan. Abates Defend. Dead.
Coleman vs Gauze. Contd.
Wallias v. Meek. Discontd.
Johnston v Stephens Contd.
Wilson vs Hannon Contd
Mitchell vs Zane Contd
Williams vs Presser Contd
Kurtz v Jones Contd.

Croghan vs Henry	}	Contd.
v Springer		
v Ross		
v Powell		

Hite vs Dodson Contd

Thompson vs Williams Contd.

New Petitions

Sells vs Irwin. Contd.

Campbell vs McKay. Abs. by Defds. Death.

Shilling v Blackman. Contd.

v Delaney Do.

Roach v Shaner Do

Christie, Ass. v Irwin. Do.

v Jackman Do.

Hite v Cox. Abates by Plant. Death.

Bell vs Huston. Discontd.

Parker, Ass. vs Daviss Contd.

Whitzle, Ass. vs Ryebolt. Contd.

Stone vs Crawford Extr. Do.

Wood vs Griffith Con.

Hamilton v Hawkins. Do.

Seman v Miller &c. Do.

v the same Do.

Cook v Berwick	}	Contd.
v Heartt		
v Johnston		
v Dobbins		
v Barker		

Vannatree vs Pelton &c Contd.

McKenzeys vs Semple Cont.

Ryan v Clerk Do.

McDonald v Grimes Do.

Deale vs Grove Do.

Tennell, Ass. vs Marshall —

Colvin vs Ryley Contd.

Wells vs Johnston. Contd

Redford, Ass. vs Hill Do.

Ryan vs Caswell Do.

- v Shaner Do.
 Brent v Teegarden Do.
 Owry vs Fisher Do.
 v Miller Do.
 v Maurer Do.
 (112) Farree v Duck Contd.
 v Sinnett. Contd
 Pigman v Seaton Contd
 Stebbs v Templeton Do.
 v Daviss Do.
 v Accord Do.
 v Carter Do.
 v Edwd. Doolin Do.
 Caswell, Ass. v Girty. }
 v the same } Contd.
 v the same }
 v the same }
 Caswell v Scott. Contd
 Clinton vs Cuninghame Contd
 v Donne Do.
 Weckwire v Downer Do.
 Holliday v Jones Do.
 v the same Do.
 v the same Do
 Wells v Zane Do.
 Hawkins v Bodkin Do.
 Watson v Kuyendall Do.
 Hawkins v Coffee Do.
 Little vs Brounfield Do
 Virgin vs Colvin Do.
 Paul vs West Do.
 Day vs Christie. Do.
 Taylor vs Byerly. Do.
 Humble vs Clerk Do.
 v Burns Do.
 Devoir vs Scott Do.
 Jones v McDowell Do.
 Fowler v Brown Do.
 Wall vs Doolin Do

- Waddle, Ass. v Arle Do.
 Farree vs McCatney Do.
 v Carrell Do.
 v Macken Do.
 (113) Frederick Farree, Ass. v Kinkaid Contd.
 Brent vs Simpson Contd.
 Cresip v Colwell Abs. by Plaf. Death.
 v Philips Do.
 Swigert v Sinkman [?] }
 v Corree } Abates by Plan. Death.
 v Beeler }
 v Myers }
 v Myers }
 McClelan vs Small Contd.
 v the same Do.
 Daviss, Ass. vs. Downer Do.
 Devoir v Warner Do.
 v Hanks Do.
 Decks v Groggs Do.
 Harden Ju. v Kinkaid Do.
 Miller, Ass. v Custard Do.
 Ryan vs Ross Do.
 Tennal, Ass. v. Marshall Do.
 Maxwell vs Ashcroft Do.
 Killay v Cox Do.
 Walls v Zane Do.
 Kuykendall v Dunn Do.
 Cuninghame v Bruce Do.
 Jollery v Barker Contd.
 Moore v Churchell Do.
 Schane, Ass. v Stephens Do.
 Jackson v Clerk Do.
 Bowley v Swigert Do.
 v Russell Do.
 McGrue v Ward. Do.
 Morrison v Armstrong Do.
 Gather v Swearingen Do.
 Ross v Dunfield. Do.
 Jacobs v Brasheers Do

Lennett v Aston. Abates by D. Death.
 Dean v McNamey Do.
 Loughlin v the same Do.
 (114) Rowleter v Labatt Contd.
 Steel v Moncck Do.
 Jackson v Clerk Do.
 Hall v Redman Do.
 Mordecai v Kuykendall Do.
 Decmp v Freshwater. Abates by Pl. Death.
 Thomas v Lambert. Contd.
 McCollister v Black Do.
 Savage v Teegarden Do.
 Finn v Williams Do.
 Adams v Horn Do.
 Lain v Peyton Do.
 Wallace v Meek. Disctd.
 House v Mayhon Contd.
 Virgin v Moore Do.
 Collings v Dolton Do.
 — Ass. v Clerk Do.
 Adams vs Huston Do.
 Cleldening vs Caarmichell Do.
 Hanthorn, Ass. v Martin Do.
 Semple v Owery Do.
 Hamelton v Hawkins Do.
 Rouse vs [?] Do.
 Crawford v Aston. Abates by D. Death.
 Johnston v Watson Contd.
 Morgan v Wheeler Do.
 Steel v Thomas Do.
 Ewalt v Ross Do.
 Daugherty v Aston. Abates by Def. Death.
 McGloughen vs Irwin Contd.
 Pearce vs Cherry Do.
 Semple v Carrell Do.
 Moore v Ritchnin Do.
 Daugherty v Blacke Do.
 Devoir v Tygert. Do.
 (115) Tygert v Lindsey Contd.

- v the same Contd.
 v the same Do.
 Stewart v Scott. Do.
 Theobald v McCoy. Abates by Partys Death
 Holliday v Zane. Contd.
 v Wortherington Contd.
 Simmon & Campbell v Gaughagain Contd.
 Kuykendall v Kuykendall Do.
 v Holliday Do.
 v Heath Do.
 v McGuire Do.
 v Hogland Do.
 Vallandingham v Springer }
 v Clemans }
 v Meeks }
 v Hartley } Contd.
 v Lindsey }
 v D. Lindsey }
 Farree v Linn, Sen. Do.
 Downard v Parr. Abates by Defds. Death.
 Maxwell v Thompson Contd.
 Reed v Clerk Do.
 Dealton v Shannon Do.
 Clinton & Noble v Dooland Do.

New Petitions.

- Smallman v McDorend }
 v Gaunseley } Contd.
 v Scott }
 Swigert v Higinbottom }
 v Newland }
 v Scott } Abates by
 v Pelegon } Pl. Death.
 v Cox }
 v Castle }
 (116) Daugherthey v White }
 v Philip }
 v Brownfield } Contd.
 v Bailey }
 Ass'ee. v McGinn }

Ross vs Swift Do.

v Black Contd.

McClure v Lynch

v White

v McCarty

} Contd.

Hawkins v Labatt Cont.

Bruce v Aston. Abates by D. Death.

Clerk, Ass. v Downer. Contd.

Irelawin v Ferree Do.

Holms v Huston Do.

Lynch, Ass. v Ornsbey. Do.

Anderson v Girty. Do.

Finn v Williams Do.

Kendall v Brounfield Do.

Parr v Korn Do.

Garrey v McCollogh Do.

McCullum v Edwards Do.

Christie v Alexander. Do.

Spear v McDoran Do.

Fitzgerreled v Ryley Do.

- (117) A Commission from his Ex. the Gov. appointing Matthew Ritchie Sheriff of this County was read, Whereupon the said Matthew Ritchie Informed the Court that he had Taken every Method in his Power to Procure deputys to assist him in the Exn. of his Office, but from the present State of the fees, Together with the Contested Boundry of the County, and the small Emoluments Arising to the Sheriff of this County, although he has offered the whole to any Person who would act as Deputy, he has not been able to procure one, and Therefore refused to Act or Qualify into his Comm. Whereupon Geo. McCormick Gent. is recommend to his Excellency as a proper Person to Serve as Sheriff of this County. Ordered that the Clerk Transmit a Copy of this Recommendation to his Exc. as soon as Posible, with an Apolighy for the frequent application the Court are under the Disagreeable Necessity of Making for Sheriffs Commissions, and also inform his Exc. that a Commission appointing the said Geo. M^cCorm. Sheriff, was issued some Time ago, but the said M^cCormick was then an

Officer in the Continental Service, and Contrary to his Expectation the Genl. would not at that Time Suffer him to resign, and consequently could not Serve, but Since has been permitted to resign and is now clear of the Army, and now assures the Court that he will Except of the Office and have the Duty Done.

Geo. McCormick Gent. is appointed Sheriff for one Month. Entered into Bond, Sworn accordingly.

(118) Ordered that the Sheriff pay out of the Depositum in his hands in the State of the County Levy, the following sums.

To W^m. Nemmons as pr. Genl. [?] £6. 12

To. for Express 6. 0

To the Sheriff for three Called Courts. 600 lbs. Tob'o. 3. 15

To Executing a Negro man belong'g. to J. DeComp 1. 7. 6.

Ordered that the Clerk send the recommendation of the Sheriff to the Governour by Express for the said Sheriffs Commission for which he shall be allowed Eighteen pounds.

Deed poll William Price to Andrew Robetson was acknowledged by the said Price party thereto, and ordered to be recorded.

Two Deed polls Christopher McDonald to Robert M^cGee was acknowledged by the said Christopher party thereto and Ordered to be Recorded.

George McCormick Gent. high Sheriff come into Court and protested against the Insufficiency of the Goal to Secure Prisoners.

Thomas Applegate is Appointed Surveyor of the Road from his House to William Andersons on the Monaungohela, and that the Inhabitents within three miles on Each side of said Road, work on, Cut open and keep said road in repair.

Ordered that Court be adjourned to Court in Course.

EDWD. WARD.

(119) At a Court continued and held for Yohogania County, the 25 Jany. 1779.

Present Benja. Kuykendall, Saml. Newell, Joshua Wright, Oliver Miller, Gent. Justices.

Ralph Bowker took the Oath of a Deputy Clerk for the County of Yohogania.

George McCormick Gent. took the Oath of High Shff. for the space of one month.

Hugh Sterling a Deputy Shff. for the space of one month for the County of Yohogania came into Court and made Affirmation according to Law.

Paul Mathews came into Court & took the Oath of a Goaler according to Law for one month.

Ordered that this Court be adjourned till Court in Course.

BENJA. KUYKENDALL.

(120) At a Court Continued and held for Yohogania County, March 22nd. 1779.

Present, Joshua Wright, Benjamin Kuykindall, Oliver Miller, Joseph Beckett, & Joseph Beeler, Gentlemen Justices.

Deed Poll George McCormick to Henry Renkin & Alex. McBride, also the Rec't. thereunto annexed was acknowledged by the said McCormick a party thereto, and O. R.

Saml. Irwin Swore in Attorney.

Inventory of the Estate of John McClery deceased returned. Ordered to be Recorded.

The last Will & Testament of James Devoir decd. was proved by Nicholas Depugh Tobias Decker & Daniel Depugh Jun. Witnesses thereto, & O. R.

John Devoir Sworn Ex. of the last Will & Testament of James Devoir, decd.

Ordered that Nicholas Depugh, Daniel Depugh, Jonh Decker & John Crow or any three of them being first Sworn do appraise the Est. of Jas. Devoir, & make return to next Court.

Deed Poll. Danl. Deshay to John Miller proved by Nichs. Depugh Danl. Depugh & Tobias Decker Witnesses & O. R.

Deed Poll, Peter Swath to Danl. Depugh acknowledged and O. R.

The last Will & Testament of Cathr. Lamb proved by Peter Swath & Henry Devoir two of the Witnesses thereto & O. R. Peter Black, John Devoir, John Lyda & Michael Myers appointed to appraise sd. Est. and make a return thereof to next Court.

(121) Samuel Frye is appointed Constable in the room of Nichs. Depugh.

Isaac Vance v Danl. Williams. Eject.

Order for Survey & Jury of View.

John Morrison is appointed Constable in the room of Benja. Vannater.

Ordered that this Court be adjourned till 7 O'clock Tomorrow morning.

BENJA. KUYKENDALL.

Court met according to adjournmet March 23rd. 1779.

Present, Edward Ward, John Cannon, Richard Yeates, Joshua Wright, Oliver Miller, Gentlemen Justices.

Deed Edward Ward to George Ross the Elder, and George Ross the younger with the receipt anaxed was acknowledged by the sd. Ward. O. R.

Deed Edward Ward to John Campbell was acknowled & O. R.

Deed John Campbell Gent. to Joseph Simon acknowled. O. R.

Deed Joseph Simon & wife to John Campbell Gent. proved as Directed by Act of Assembly & O. R.

(122) Deed Christopher Miller to Joseph Simon & John Campbell, proved according to Act of Assembly & O. R.

John Corbley Jacob Vanater Abraham Vanmater Isaac Dye, John Eastwood, Abraham Holt, John Holt, Robert Tyler, having produced recommendations from the County Court of Monongehala to pass unmolested to the Falls of Ohio which was read and approved of.

Present Thomas Smallman & Thomas Freeman & William Harrison Gent. Justices.

Richd. Yeates Gent. Absent.

Administration of the Est. of John Murphy is granted to Van Swearengen he having comply'd with the Law.

Admn. of the Est. of Henry Brindley is granted to Van Swearengen he having complied with the Law.

Ordered that Nathl. Brown Isaac Israels Thomas Edginton Nicholas Vinamon any three of them do appraise the Estates of John Murphy & Henry Brindley, decd.

John Springer v Henry Kearsy.

Left to the award of John Cannon, Joshua Wright Geo. Valandingham, Gabl. Cox & Jno. McDonald Gent.

Benja. Kuykendall Gent present.

(123) Deed Poll Valentine Thomas Dolton to Edwd. Ward was proved by the oath of Thomas Smallman, William Christie, & Jacob Bouseman Witness thereto and O. R.

Deed poll Wm. Brashers to Van Swearingen was acknowledged and O. R.

Samuel Newel Gent. Present.

The administration of the Estate of Thomas Cook formally granted to Anne Cook ordered to be set aside, and that the said Administration be granted to the said Anne Cook and Gabriel Cox they having Complied with the Law.

Charles Records with Henry Kearsy his Securt. came into Court and enter'd. into Recog. for the Personal appearance of sd. Records at the Next Grand Jur. Cour. held in £ 100 Each.

William Goe, Gent. Pt.

George Valandingham Pt.

Inventory of the Est. of Jas. Loudon decd. retd. & O. R.

Deed Poll Wm. Coventry to Jno. Miller Ackd. & O. R.

Adam Patterson v Wm. Tidball Benja. Swat Spl. Bl.

Sale of the Est. of Fredk. Farree decd. retd. and O. R.

Sheshbazzer Bentley v Camp. Agreed.

v Vititoe)

v Eglin)

v Warren)

Ordered that a Didimus

Issue to examine Wit.

(124) Spears v McMahan. Ordered that a didimus Issue to take deposition in sd. Cause.

Ordered that the Recommendation of George McCormick as Shff. be sent to the Gov. and the Com'n. brought up at the expence of the Co'ty.

George McCormick Sworn Shff for one Month.

Benja. Vanater and Jno. Lamson sworn Deputy Shffs for one month. -

Wm. Bennett appointed Constable in the room of David Philips.

Tobias Matlocks appointed Consta. in the Room of Jno. Hull.

John Dean & John Hoglin his Securt'y held in £100 each for the sd. Deans appr. at next May Co't.

Ordered that Thos. Ashbrook Joseph Snowden James Bradford & Thos. Edginton or any three of them do view a Road the nearest and best way from Catfishes Camp to Pentecost's Mills and make a return to the next Court.

Isaac Walker and Gabl. Walker his Secut'y held in £100 each for the appr. of the sd Isaac the next G. J. Ct. and that Thomas Townsly be committed to the care of Gabl. Walker till May Court.

Ordered that Moses Bradley be summ'd to appear at the next Ct. to answer the complt. of Jno. Golahar for not doing his duty as a Constable.

Pentecost v Lynn. Ordered that a Didimus Issue to Examine Parties Wit's. and that the same be tried at Sept. Court.

George M^cCormick Gent. Protests against the Sufficiency of the Goal.

Deed Poll Jno. Dunn to Geo. Wallace proved by the Oaths of Joseph Skelton & Hugh Oharra. Ord'd. to ly for further proof.

(125) Ordered that Court be adjourned till tomorrow morning 8 O'Clock.

EDWD. WARD.

Court met according to adjournment March 24th. 1779.

Present Edwd. Ward Wm. Gowe, George Valandigham, Richd. Yeates, Thomas Freeman & Wm. Harrson. Gent. Justices.

Hugh Ohara	} Atta.
vs	
Peter Brandon	} Contd. at Def. Costs.

Thomas Smallman & Benja Kuykendall Gent. Joshua Wright, Present.

Brashears v Hamelton. Then came a Jury, 'Towit. Jos. Skelton, Jacob Bousman Saml. Ewalt David Day Jno. Hougland Jas. Munn Sheshbazzar Bentley, John Campbell John Farree James Burris William Colvin Thomas Gist, Verd't. for Plt. & Judgt. £ 500.

The fine imposed upon Jos. Noble for not appear'g. as a Grand Jury Man is omitted.

Shuster v Lyda Agreed.

Deed Poll Peter Brandon to Hugh Oharra was proved by the Oath of William Christie a Wit. Ordered to ly for further proof.

Ordered that the Allowance Allo'd Jane Armstrong the wife of ——— Armstrong a Soldier in the Contin. Service be contd. to the Date Hereof.

(126) Admn. of the Est. of the late Colo. White Eyes is granted to Thos. Smallman he having complied with the Law.

Jos. Skelton David Duncan Wm. Christie & Saml. Ewalt appointed appraisers to said Est.

Appraismt. & Sale of John Green's Est. ret'd. & O. R.

Administration of the Est. of Benja. Tate dec'd. is granted to Jacob Bousman he having complied with the Law. Wm. Christie, Jos. Skelton David Duncan & John Ornsby appoint'd apprais'rs of sd. Est.

Deed Poll Jas. Burris to Hugh Ohara acknd, also the Asst from Ohara to James McLeland & Wm. Redick acknowledged & O. R.

Pentecost v. Jones & Mayes [?]. Ordered that a Jury be Summ'd of view attend upon the Land and that the Survr. and Shff attend likewise.

Oliver Miller returns the following fines :

Robt. McGee for Drunkenness 5 S.

Jno. Hall 5 S. Wm. Brashers 15 S. George Sickman 20 S. & James Bruce 20 S. for prophane Swearing. Clerk Rec'd. the Money.

Ordered that the Ferries on the Monongehala River be allowed 2^s. 6 for a man & the same for a Horse.

Ordered that Paul Mathews be allowed 75. 5. 10 for furnishing Prisoners & find'g Irons for Criminals.

Ord'd that Jno. Ornsby Esq. be appointed to keep a ferry Over the River Monongehala from the Toun of Pittsburgh to the opposite Shore and that he be allowed 2^s. 6 for a man & the same for a horse and that he keep one good Boat and Sufficient hands to work her and that he give Bond agreable to Law, at the next Court.

Brashers v Colvin. Thos. Freeman S. B.

John Hogland v Geo. Riggle & Matthew Loghlin. Ordered that Didamus Issue for Examine of Witness.

Ordered that Court adjourn untill Tomorrow Morning 8 oClock.

EDWD. WARD.

Court met according to adjournment 25 March 1779.

Present Richd. Yeates, Thos. Smallman Joshua Wright, Benja. Kuykendall, Thos. Freeman Gent. Justices.

Ordered that Wm. Spurgen Thos. Cushman Thos. Moore Zebulun Hog be appointed to appraise the Est. of Danl. Greathouse's decd. & make retn. to next Court.

Assingmt. of two Deeds Poll Jas. Ellis to Saml. Irwin Ackd. & O. R.

(128)

Attachments.

Patrick Clerk v William Paxton. D. N. ap.

Oharra v Brandon Contd. Pl. Costs.

Cumings v Lindsey D. N. ap.

Cox v Nelson. Contd.

Graybill v Hall D. N. apl.

Ritchie v Hall Contd.

Depugh v Hardin Contd.

Issues.

Cox v Williams Contd.

Lydea v Cox Contd

Wherry v White Contd

Miller v Humble Contd.

Pentecost v Jones C. O.

Johnston v Swearengen Contd.

Brownlee v Duglass Contd

Shilling v Newkirk Contd.

Same v the same Contd.

Myers v Hooper. Contd.

Mitchell v same Contd.

Shilling v Fortner Contd.

Hooper v G. Myers Contd.

v same Contd. v Thos. & ux Contd.

Fullum v Johnston Contd.

Springer v Kearsey Contd.

Spear v Jones Contd

McCauley v Jones Discon'd. N. P.

Campbell v McCoy Ab. Dt. Dead.

Spear v Winemiller Contd.

Semple v Collings Disd. N. Apr.

Collings v Semple D'd. N. Apr.

Bouseman v McGoldrick Contd

Ward v Thorn &c. Contd

- Jones v Speers Dis'd. N. Ap.
 Hickman v Brownfield Disc'd.
 Pentecost v Linn Contd.
 Corn v Miller dism'd.
 (129) Pentecost v Briscoe Contd.
 McGinnis v Gibson discount'd.
 Shilling v Taylor Contd.
 Hawkins, Ass. v Clerk Contd.
 same v Kuykindall, Contd.
 Malone v Thomas. discontd.
 same, Admr. v Smith. discontd.
 Eaton v Kennon Contd.
 Same v McClellen Contd.
 Bonce v Mordacai Contd.
 Same v the same Contd.
 * McDonald v Scott discontd.
 Same v Cavitt Do.
 Same v Hanna Do.
 Brawdy, Ass. v French Contd.
 Grubb v Dawling Contd.
 Vallandingham v Tygert Contd.
 Thomas v Hanna &c. discontd.
 Same v Same Do.
 Same v Caveat Do.
 Haney v McCay. Abates by Defds. Death.
 Chambers v McFarlane & ux. discontd.
 v Michael Thorn Do.
 Ward v Thorn &c. Contd.
 Woods v Gray disctd.
 Beeler v Wells. Contd.
 Cook v Paul Froman Contd.
 Same v Shilling Contd.
 Same, Ass. v McClellen Do.
 McManamy v Robertson Contd.
 Crow v Williams discontd.
 Crow & ux v Same }
 Do v Do } discontd.
 Semple, McKinzie Contd.
 Hickman v Dunfield discontd.

- Wilson v Hanna Do.
 Colvin v Frederick Do.
 Holliday, Ass. v Hawkins Contd.
 Cressip v Dooling A.P.D.
 Same v Peters Do.
 Same v French Do.
 (130) Beall v Finn &c.
 Beall, 3^d Assinee. v McMachen } Contd.
 Hamelton, Ass. v Dunfield }
 Harrison v Paul A.D.D.
 Neavill v Gist Contd.
 Ryley v Hanna discontd.
 Cressip, Adm. v Teagarden A.P.D.
 Teagarden v Hammond discontd.
 Cresip v Swearengen Contd.
 Felps v Semple Discontd.
 Campbell v Beall Contd.
 Paul v Smith discontd.
 Common Orders.
 Warshington v Pearceall Contd.
 Vance v McNew Contd
 Colwell v Frye &c. Impl.
 Henderson v Kinkaid Contd.
 Morrison v Vannatree Contd.
 Same v Benjamin Vannatree. Contd.
 Bouseman v McGoldrick Contd.
 Froman v Dean Impl.
 White, Sen. v Johnstown Judgt W. E.
 Swigert v Murphey Judgt. W. E.
 Brashers, Adm. v Colvin Plea No dem'd. Contd.
 Same same v Brashers. Judgt. W. E.
 McCullum v Brashers, Adm. discontd.
 Whitacker v Dixon discontd.
 Croghan v McConnell }
 v Elrod. }
 v Davidson }
 v Royall }
 v Kysor }
 v Connor } Contd. Plt.

v Grant
v Gibson
v Hunter
v Witzel
v Ross

- (131) George Croghan v Wm. Thompson.
v McCartney } Contd. Plt.
v Ramage }

Elliott v Collins Contd.

Ferguson v Carroll discontd.

Cox v Dicker discontd.

Duncan & Barr v Clarke &c. discontd.

Liming v Douging Do.

Carswell v Dunn Do.

Croghan v Ross
v Springer } contd.
v Henry }

Wickwire, Assee. v Harrison discontd.

Hawkins, Asse. v Hanks contd.

v Zane contd.

Deeck, Assee. v Swearengen discontd.

Kuykendall v Roberts A. P. D.

Holladay v Bell & ux. discontd.

Chambers v Emberson discontd.

Vallandigham v Chriswell Do.

Writs of Enquiry.

Hawkins v Wheat contd.

Nelson v Shilling contd.

Shilling v Nelson contd.

Spivy v Beeler contd.

Laurence v Rogers discontd.

Lindsay v Long discontd.

Kuykendall v Ross A. P. D.

McElroy v Templin } contd.
v the same }

Hand v Whitaker contd.

Armstrong v Owens & ux. discontd.

- (132) Barrackman v Mutz discontd.

Boley v Springer contd

- Hayes v Deale contd.
 Bruce v Pelton discontd. Plt.
 Ewalt v McCollister contd.
 Hougland v Riggie agreed.
 v Loughlin contd.
 Swissicks v Swissicks contd.
 Newkirk v Shilling contd.
 McFarlane v Beeler contd.
 Andrew v Johnston contd.
 Mathews v Marshall & ux. contd.
 Howe v Genoway & ux. discontd.
 Cox v Britsman contd.
 Vannater v Bradon contd.
 v Parkerson Do.
 Vanater v Kuykendall Dis Contd.
 Burris v Williams Contd.
 Jones v McDonald Do.
 Dawson v Kirkpatrick Do.
 Hall v Wells & x. Do.
 (134) Grimes v Logan contd.
 Beeler v Walker Do.
 Woods v McKee Do.
 Morrison v Surgart Do.
 Froman v Boyce Condition perfd. & Contd.
 Deale v Hayes Contd.
 Crookes v Hougland Contd.
 Patterson v McCornish Discontd.
 Ralston v Lowry Judgt. W. E.
 Pearse v Evans contd.
 Wallace v Duncan Do.
 Tigart v Boley Do.
 v Chamberlain Do
 Tigart v Davis Do.
 Devoir v Pelton A P. D.
 Clarke v Again Issue I'd.
 Springer v Listnett. Agreed.
 McKy v Davidson }
 v The same } Contd.
 Mattocks v Brown Do.

- Brown v Mattocks Do.
 Lyda v Collins Do.
 Caldwell v Houglin Do.
 Witzle v McElwaine Do.
 Caldwell v Corn Do.
 Henry v Sloane Judgt. & W. E.
 Heath v Bruce N. G. w. Leave.
 Fry v Tilton } Judgt. & W. E.
 v The same }
 Chamberlain v Henthorn. contd.
 v Hickman A. D. D.
 (135) Spear v Proctor contd
 v Gist contd.
 Croghan v Waugh Do.
 Newell v Robertson Do.
 Kuykendall v Hawkins Do.
 Shilling v Young }
 v The same } contd.
 v Demink }
 v Proctor }
 Nevill v Wisemen Do.
 Noble v Chamberlaine. Judgt. for Want Plea.
 v Key & x. Jt. W. E.
 Shilling v Martin contd.
 Hawkins, Ass'ee. v Hillibrand Judgt. for want of Plea.
 Ass'ee. v The same Do.
 v White Do.
 Hardin v Hawkins discontd.
 Spears v McMahan contd.
 Prather v Beaty. Judgt. Ex. if Bd. found. Iss'd.
 Wells v Brown agreed.
 Blackburn, Ass'ee. v Peak. contd.
 Brashers v. Swearengen discontd.
 Schley v Smith contd.
 Conrod v Carter Do.
 Hiser v McConnel Discontd.
 Wood v Griffith contd.
 Misely v Housinger discontd.
 Mitchell v Scott Do.

- Rogers v. Proctor contd.
 Oury v Brown Discontd.
 Clinton & Noble v Brashers contd.
 Baker, Ass'ee. v Hargis. Discontd. Pl. out of Country.
 (136) Waggoner v Warner contd.
 McGrew v McConnel Do.
 The same v Philips Do.
 Glenn v Hinton. Abates by P. death.
 Bowley v Ross
 The same v the same } Agreed.
 The same v the same }
 Bouseman v Douseman Judgt.
 Same v the same Do.
 Same v John McClean Do.
 Kuykendall v Dunn. Abates by P. Death.
 v William Hawkins. Abs. by P. D.
 v Benjamin Vannatree. Abates by P. Death.
 McMahan v Irwin contd.
 McCandish, Ass. v McComish. Do.
 Taylor v Irwin discontd.
 Drinning v Zane discontd.
 Moore v Ritchman contd.
 Smallman v Slover contd.
 Virgin v Moore Do.
 Barker v Jourden Do.
 Wallace v Meek Dis'd.
 Armstrong v Rammage contd.
 Redford, Assine v Hill Do.
 Wilcox v Craighead Do.
 Barrackman v Shivily Do.
 Beall Jun. v Shawn Judgt.
 Keller v Jones A. D. D.
 Reasoner v Shearer contd.
 Brent v Beeler Judgt.
 Ramsey v Chambers } contd.
 The same v the Same }
 Stephens v Berwick discontd.
 Heath v Farree contd.
 Parkin v Colloway Do.

- T. Cresip v Shearer Do.
 (137) Hughs v Thomas contd.
 Stephens v Shilling Do.
 Dye v Dye discontd.
 Downer v Teagarden contd.
 Thomas v Lee contd.
 Wilson v Cockburn. Do.
 Brownfield v Cox Do.
 Bonce v Long Do.
 Tygert v Dunnovan Do.
 Colwell v Brouster Do.
 Summerall v Brouster Do.
 Shearer v Miller Do.
 Baker v Hendricks. Do.
 Whittaker v Dixson Do.
 Wells v Reredon & ux. Do.
 Whitzel v Shearer Do.
 Gollehar v Docking Do.
 Stephens v Stout Do.
 McMullin & ux v Dickerson Do.
 The same v the Same Do.
 Moore v Virgin & ux Do.
 Same v R. Virgin Do.
 Moore v Virgin Do.
 Boyce v Philips Do.
 Campbell v Brownfield. Do.
 Harrison v Sheerr Do.
 Vowill v Penum contd.
 Jones v Clerk & x contd.
 Phelps v McGrew Do.
 McMichiel v French Do.
 Purcel v Gibson Do.
 Half Penny v Whitzel Do.
 Thomas v Morght & x contd.
 Park v Cockron A. P. D.
 Ireland v Wilson. Do.
 (138) Collings v Brady contd.
 Black, Ass'ee. v Dunleavy Do.
 Vaughan v McMahan Do.

Stephenson v Read & x Do.
 Small v Gray. Do.
 Tedball, Ass'e. v Shaner. Do.
 Anderson, Ass v. Hughy Do.
 Stephenson v Barnitt Do.
 McClellan v Guy Do.
 Shley v Smith Do.
 Young v Jackman Do.
 Lynn v Tilton Do.
 Martin v Johnston Do.
 Chamberlain v McLean Do.
 Ruse v Haymaker Do.
 Altman v Hanna & x. Contd.
 Martin v Glass & x contd.
 v Hamilton Do.
 Black v Chamberlain Do.
 Mordacai v Bond Discontd.
 v Nigh Do.
 Black v Jolly } discontd.
 Black v Hannah }
 Tygert v Barns contd.
 The Same vs Jeffery Do.
 Winebiddle v French Do.
 Young y McCullogh Do.
 Morrison v Ross Do.
 Brownfield v Smith Do.
 Hunter, Ass. v Jones Do.
 Caswell v Dunn Do.
 Wallace v Murdock Do.
 Fosset v Meeks Do.
 Campbell, Ass. v Dunn Do.
 Ridgley & Cop'y. v Lynn Do.
 Morecroft v Cooling Do.
 Fleming v Gibson Do.
 Dunfield v Hickman }
 v Ross }
 v John Rossell } contd.
 v Lindsey }
 v Fossit }
 v Pearcifull }

Stelt v Johnston }
 v Richd. Johnston } Do.

Downer v Morrison Do.

Woods v McGlashen Do.

Stiger v Smith Do.

Eliott & Cop'y. v Martin Do.

Lynch, Inf'd. v Loughlin Do.

Semple v Ferns &c. Do.

Gray v Harrison Do.

Croghan v Bowly

 v McCallister

 v Bouseman &c.

 v McKee.

 v Kuykindall A. D. D.

 v Ritchman

 v Whittaker

 v Abr. Whittaker

 v Jas. Whittaker

 v Benj. Kuykindall

 v Frederick

 v Rowleter

 v McLean

 v Bouseman

 v Grimes

 v McGrew.

 v Troop

 v Swissicks

 v Meekes

 v McManamy

 v Drummond.

 v Campbell.

} Contd.

(140) Geo. Croghan v Eleazer & James Myers.

 v Gibson

 v Weddle, Senr.

 v James Beard

 v Abr. Mitchell

 v Miller

 v Armstrong

 v Renno

} contd.

v Elliott
 v Price
 v Louden
 v St. Clair
 v Robt. Louden

St. Clair v Labatt contd.

Clerk v Teebolt Do.

Iler v Adams Do.

Girty v Hannah Discontd.

Gaughagain v Smith Contd.

Enoch v Teegarden Do.

Clinton v Mayes Do.

Hawkins v Humble Do.

Fife v Holliday Discontd.

Fife v Fife

Fife v Churchwell } Contd.
 v Fife }

Hite v Morgan

v White

v Evins

v Myrnett

v Deavebaugh

v the same

} contd.

Bryan Bruin v Wm. Fife

v the same

v the same

v the same

} Do.

Dolton v Gruver discontd.

Same, Ass'ee. v Shaner Do.

Hales v Roach contd.

(141) Morgan v Nicholas

v Bond

v Chamberlain

v Beavers

} contd.

M. Morgan v Wyer

Same v the same

} discontd.

Kuykendall v Pearcifull. Abates by P. Death.

v Pancate same.

v Douthwait same.

- Williams v Vannatree agd.
 v Crow discontd.
- Price v Lynn contd.
 v Weddle Do.
 v Hanks Do.
- Gray v Poston Do.
 v same Do.
- Tygart v Dunnavan }
 v Craven }
 v Vannatree } Do.
 v Elisha Craven }
 v Hogland }
- St. Clair v Sills Do.
- McCullogh v McCormick & ca. }
 v Douthwait } P. D.
- Elliott v Girty Contd.
- Hawkins v Beall }
 Same v the same } discontd.
 v Same }
 v Patrick Gary. Abates. D. Dead.
 v Perkerson. contd.
- Semple v Thompson discontd.
- Robertson v Crow contd.
- Shilling v Newkirk Do.
- Rogers v Williams &c }
 v Parr }
 v Tumbleston } Do.
- Zane v Hawkins Discontd.
- Zane v Drening Do.
- Zane, Ass'e v Holdman contd.
- (142) Castleman v Tabor contd.
- Elliott, Adm. v Hargis }
 McMullin v Dickerson } D. contd.
 Ross, Assinee v Clemons }
- Devoir v Dunn A. P. D.
- Lyon v Dunking contd.
- Hozier v Bruce Do
- Glassell v Kizer Do.
- Glassell v Young Do.

- Anderson v Rees Do.
 Dunleavy, Ass'e. v Ferrell Do.
 Hammond v Teegarden Discontd.
 Armstrong v Oharra contd.
 Thomas, Ass. v Stack Do.
 Ward v String Steel }
 v Same } Do.
 Jones v Evins }
 v the same } Do.
 v McGoldrick }
 v the same } Do.
 Ogle v Wilson Do.
 v the same Do.
 Labatt v Rammage Do.
 Hamelton &ca. v Goe Do.
 Cleldening v Logan Do.
 Nevill v Holliday Do.
 Kizer v Davidson Do.
 Kelso &c. v Pigiott Do.
 Allen v Logan &c Do.
 v Duglass Do.
 Hilderbrand v Hawkins Do.
 Same, Assin'e v Hanks }
 v Do. } discontd.
 Wallias v Briscoe Do.
 v Same Do.
 Swearengen v Spencer }
 v the same } do.
 (143) Smith v Smallman contd.
 v George Schley & ca. discontd.
 Martin v Elliott contd.
 Brachen v Casat Do.
 Jones v Ormsback Do.
 Crawford, Exr. v Cox Do.
 Heath v Parker Discontd by Plt.
 Heuthorn v McCarty Do.
 Roots v Cook contd.
 Spencer v Swearengen Discontd.
 Brent v Jones contd.

- Colwell, Assinee v Lynn Do.
Kidd v McConnell Do.
Lynch v Jones Do.
 v Berwick Do.
Mitchel v Zane Discontd.
Drenning v Bay contd.
Braden v Elliott &c. Do.
Cook v Hilderbrand Do.
Johnston v Steel Do.
Holliday, Ass. v Wortherington. Discontd. Plt. & Judgt.
for costs.
Hamelton v Martin contd.
Berwick v Atkinson Do.
Gilfillen, Ass. v Tygart Do.
McQuitty v Gray Do
McCollister v Scott Do.
Bowley v Tygert Do.
Robertson v McGoldrick Do.
McIlroy v McMahan Do.
Atkinson v. White Do.
Price v Crawford Do.
Wheat v Kermichael Do.
Scott v Vallandingham Do.
Campbell v Hanks Do.
(144) Holliday & Co'p. v Stout contd.
McCarty v Craighead Do.
Lyons v Humble Do.
Frazier v Chambers Do.
Miller v Hill Do.
Coins v McQuin & ca. Do.
Boyd v Thomas Do.
Wright v Springstone Do.
Davidson v Hanks Do.
Walker v Dresnett Do.
Clerk v Hawkins Do.
Smith &c v Girty Do.
Dillo v Perkie Do.
McManamy v Oharro Do.
Richman v Scott Do.

Ferrell v Daugherty Do.
 Alen Tharp v Collings Do.
 Ormsbrey v Oharra Do.
 Bouseman v Ornsby Do.
 Thomas v Elliott Adr. Do.
 Christie v White Do.
 Brinkers, Ex. v Hardin Adr. Do.
 Daviss Jun. & Co'p v Young Do.
 Elvy v Dunn Do.
 Lyon v Downer Do
 Mitchell v Wade Do.
 Wilson v McGinnis Do.
 Coleman v Gause Discontd.
 Johnston v Stephens contd.
 Wilson v Cannon Do.
 Mitchel v Zane Discontd.
 Williams v Pressor Contd.
 Croghan v Powell Do.
 Hite v Dodson Do.
 Thornton, Ass v Williams Do.
 Ornsby v Bouseman Do.
 Dunlavy v Roberts Do.

(145)

Petitions.

Sills	v Irwin
Shilling	v Blackman
	v Delaney
Roatch	v Shaner
Christie, Ass'e.	v Irwin
	v Jackman
Parker, Assn'e	v Davis
Witzel	v Rybolt
Sloane	v Mitchell
Wood	v Griffith
Hamilton	v Hawkins
Seaman	v Miller &c.
	v the same.
Cook	v Berwick
	v Hart
	v Johnston

	v Dobbins		
	v Barker		contd.
Vannater	v Pelton &c		
McKinzie	v Semple		
Ryan	v Parke		
McDonald	v Grimes		
Deale	v Grove		
Fennel, Ass'e.	v Marshall		
Collins	v Reiley		
Wills	v Johnston		
Redford	v Hill		
Ryan	v Carswell		
	v Shaner		
Brent	v Teagarden		
Owens	v Fisher		
	v Miller		
	v Maurer		
Todd	v Sheaner		
Huffman v Williams	agreed		
146) Timmons	v Gafney		
Wright, Assne.	v Dunlavy		
Morgan	v Saltsman		
Dunlavy	v Frye		
Swigart	v Ross		
Bags	v Cummins		discontd A. P. D.
Devoir	v Anderson		
Witzle	v Valentine		
Marshall	v Brookes		
Spurgen	v Patrick		
Farree v Duck	A. P. D.		
	v Sinnett Do.		
Pigman, Ass'e.	v Laton	contd.	
Cresap & Stibs	v Templin	Judgt.	
	v Davis	Do.	
	v Acord	Do.	
	v Carter	Do.	
Chriswell, Ass'e.	v Girty	Contd.	
	Ass'e.	v The same	Do.
	Ass'e.	v the same	Do.

Ass'ee. v the same Do.

v Scott Do.

Clinton v Cuninghame Do.

v Donne Do.

Wickwire v Downer Do.

Holladay v Jones }
v the same } A. D. D.
v the same }

Wills v Zane contd.

Hawkins v Bodkin Do.

Walter v Kuykendall A. D. D.

Hawkins v Coffee contd.

Tittle v Brownfield Judgt.

Virgin v Colvin Contd.

Paul v West Do.

Day v Christy Do.

Taylor v Byerly Do.

(147) Humble v Clarke }
v Burns } Contd.

Devoir v Scott P. D.

Jones v McDowell contd.

Fowler v Brown Do.

Wall v Dowlin Do. Judgt.

Weddel v Arle contd.

Farree v McCartney }
v Carroll } A. P. D.
v McMahan }
Ass'ee. v Kincaid }

Brent v Simpson Judgt.

McLeland v Small contd.

v the same Do.

Davis Ass'ee. v Downer Do.

v Warren Do.

Devoir v Hanks A. P. D.

Dix v Groggs contd.

Hardin, Jun. v Kincaid Do.

Miller, Assee. v Custard Do.

Ryan v Pross. Do.

Fennel Ass'ee. v Mitchall Do.

- Maxwell v Ashcroft Do.
 Kelly v Cox Discontd.
 Wells v Zane Do.
 Kuykendall v Dunn A. P. D.
 Cunningham v Bruce Contd.
 Jolly v Barker Do.
 Moor v Churchill Do.
 Shaner Ass'e v Stephens Do.
 Jackson v Clark Do.
 Boley v Swigart }
 v Russell } Do.
 McGrew v Ward Do.
 Morrison v Armstrong Do.
 Mitchell & Grather v Swearengen Do.
 Ross v Dunfield Do.
 (148) Jacobs v Brashears Judgt.
 Dean v McManamy contd.
 Listnett v Same Do.
 Ralston v Labatt Do.
 Steel v Merrick Do.
 Jackman v Clark Do.
 Hall v Redman Do.
 Mordecai v Kuykendall A. D. D.
 McCallister v Black contd.
 Savage v Teagarden Do.
 Finn v Williams Do.
 Adams v Hall Do.
 Lain v Peaton Do.
 Wallace v Meek Do.
 House v Mahon Do.
 Virgin v Moore Do.
 Adams v Huston Do.
 Clendenin v Carmichael &c. Do.
 Henthorn, Ass'e. v Martin Do.
 Semple v Owens Do.
 Hamilton v Hawkins Do.
 Ross v Fransway Do.
 Johnston v Watson Do.
 Morgan v Wheeler Do.

- Steel v Thomas Do.
 Ewalt v Ross Discontd.
 McGlashen v Irwin contd.
 Pearse v Chery Do.
 Semple v Carrol Do.
 Moor v Richmond Do
 Dougherty v Black Do.
 Devoir v Tigart A. P. D.
 Tigart v Lindsey Contd.
 v Same Do.
 v Same Do.
 Stewart v Scott Do
 Holladay v Zane Judgt.
 (149) Holladay v Worshington Discontd.
 Simon & Campbell v Gahagan contd
 Kuykendall v Kuykendall }
 v Holladay } A P. D.
 v Heath }
 v McGuire }
 v Hougland }
 Valandigham v Springer contd.
 v Clements Do.
 v Meeks Do.
 v Harley Do.
 v Lindsay Do.
 v David Lindsay Do.
 Farree v Linn, Sen. Do.
 Maxwell v Thompson Do.
 Reed v Clarke. Do.
 Dalton v Shaner Do.
 Clinton & Noble v Douland Judgt
 Smallman v McDoran }
 v Gonsley } Judgt
 v Scott }
 Dougherty v White }
 v Philips }
 v Brownfield } discontd.
 v Beaty }
 Assn'e v McKean }

- Ross v Swift Contd.
 v Black Do.
 McLure v Lynch }
 v White } discontd.
 v McCarty }
 Hawkins v Labatt Contd.
 Clark, Assn'e. v Downer Do.
 Eilewine v Farree A. D. D.
 Lynch, Assn'e v Ormsby Judgt.
 Anderson v Girty Judgt.
 Finn v Williams A. P. D.
 Kendall v Brownfield contd.
 Karr v Karr Judgt.
 (150) Gary v McCulloch contd.
 McCullum v Edwards Do.
 Christy v Alexander Do.
 Spear v McDoran Do.
 Fitzgerrald v Reily Do.
 Cox v Boling Do.
 Halfpenny v Dennis Do.
 Waddell, Assne. v Brown Do.
 Ass'e. v Arnold Do.
 Shaner v Ross Do.
 v Plummer Do.
 Flinder v Morshow Do.
 Elliott v Small Do.
 v Same Do.
 v Sinnett Do.
 Wm. Elliott v Winemiller Do.
 Elliott &c. v D'Alton Do.
 v Rogers Do.*
 v Frederick Do.
 v Armstrong Do.
 v Same Do.
 Swarengen v Taylor Jugt.
 Wells v. Gaughagan contd.
 Ewalt, Ass'e. v Armstrong Do.
 Brounfield v Hustage Do.
 McMichael v French Do.

Barker v Knight Do.
 Tilton ass'e. v Bell Do
 Brinkers Exrs. v Elvy }
 v Bruce }
 v Beeler }
 v Davis } Do.
 v Spineer }
 v Moyer }
 v Vantrees }

Hite v Postlewait }
 v Wilson } Do.
 v Carter }

(151) Harden, the younger v Myers contd.

Cook v Dobins Do.
 Parkerson v Byrns Do.
 Russel v Groghagan Do
 Collins v Dobson }
 Ass'e. v Clark } Do.
 Lyons v Buther &c Do.
 Maddison, Jun. v Stirling Do.
 McMahan v Prickett Do.
 Taylor v Hanks Do.
 Cox v McMahan Do.
 Polke v Inks Do.
 Miller v Armstrong Do.
 Thomas v Lambert Do.
 Knight v Plummer Do.
 King v Hansell Do.
 McCashlin v Evans Do.
 Holms v Huston Do.
 McCallister v Corn Do.
 Decker v Wilson Do.

New Petitions.

Springer v Listnett dismd.
 Isaac Springer v the same Do.
 Stevenson v Nicholas contd.
 Beeler v Burns Do.
 Springer v Patrick Do.
 McGaughan v White Do.

Alias Capias.

- Kincaid v Henderson
 v Same.
 McDonald v Slover
 Hazle v McNew & ux
 Laughlin v Brown
 Caldwell v Thorn
 Winebidle v Valentine
 Pearse v Evans.
 Labatt v Smith & ux.
 (152) Lintenburgher v Oldcraft
 Lindsay v Hamilton
 v Smith
 Wills, minor v Blackstone.
 McElwane v Witzle & ux
 Valandigham v Walker.
 Wagoner v Rape.
 Barrackman v Woods.
 v Harry.
 Miller v Mitchel
 v same
 Harrison v Hall
 Beans v Johnston.
 Witzle v Crawford
 Burns & Al. v Louthierback
 Sumrull & al v Sumrall
 Listnett, Minor v Springer. Agreed.
 Schley v McKindley
 Howe v Genoway
 Smith v Gibson
 Miller v Humble
 Kearns v Logan
 Springer v Waller
 McMahan v Mathews
 v Hanks
 Pluries Capias.
 Rigs v Corn
 Caldwell v Mills
 Campbell v Patterson

Cummins v Baggs

Caldwell v Wray

v Thorn

Appearances.

Richards v Boley C. O.

Black v McCullum discontd.

Minor v Blazier A. C.

(153)

Beaver v Mayhall A. C.

McCormick v Hollis A. C.

Riggle v Dodd C. O.

Christie v Heath N. G. & I'd.

Admn. v Same Do.

Patterson v Tidball Spl. Bl. Impl.

Beaver, Ass'e. v Cook, Ex. Impl.

Norris v Vineyard & ux A. C.

Beeler, Sen. v Inks Impl.

Crawford v Hamilton Do.

B. I. Day v Dean Spl. Bl.

Bruce v Hougland agreed.

Lyda v Richards A. C.

Elliott v McIntosh }
v same } C. O. Dept.

Bradley v Boley C. O.

McGlaughlin v Woods A. C.

Winebiddle v Valentine P. Cap.

Curry v Wells C. O.

Ellis v Marshall & ux. A. C.

Boling v Dowlin A. by Retn.

v Norris A. C.

Fife v Tigart & A. C. A. C.

v Same A. C.

Evans v Judy A. C.

v Same. A. C.

Brewer v Stacy. Discontd.

Bentley v Camp A. C.

v Vitito A. C.

v Eglin A. C.

v Warren A. C.

- Brashears v Hamilton Dismd. p. Order.
 McDowell v McComish Defendt. G. B. Issue.
 Workman, Asse. v Saltsman A. C.
 Springer v Rogers Agd.
 McComish v Springer A. C.
 Brice v same Do.
 Henderson v Evans C. O.
 Johnston v Springer A. C.
 (154) Johnston v Mills A. C.
 Ritchie v Thornbery A. C.
 Reno v Walker Do.
 v Isaac Walker Do.
 Clark v Parkerson Do.
 v Boley Do.
 Shuster v Lyda Agd.
 Huffman v Leatherman A. C.
 Innis v Sawins A. C.
 v same A. C.
 Rogers v Murphy A. C.
 v Maning A. C.
 Swearingen v Dougherty A. C.
 Kearsy v Springer Refered.
 Collins v Vanater Agreed.
 Williams, Ass'e, v Anderson A. C.
 Tharp v Gray A. C.
 Frye v Ritchie A. C.
 Murphy, v Jourdan A. C.
 v same A. C.
 Brooks, Admr. v Roberts A. C.
 Johnston v Stephens }
 v same } discontd.
 Read v same }
 Wright v Hart A. C.
 McCormick v Wilson A. C.
 Munn v Crawford Do.
 Cox v Anderson Contd.
 Forester v Murphy C. O.
 McLeland v Beeler A. C.
 Froman v Boyce Boyce. Deft. G. R. Issues.

McAdams v Devoir A. Eject.
 Henderson v Johnston Discontd.
 Steel v Hamilton Al Eject.
 Hamilton v Brashear. Swearengen Deft. G. R. Issues.
 Bond v Evins Al.
 Valandigham v Walker A. C.
 Norris v Embly &c. Do.
 Whitesides v Girty C. O.
 Singers v McCulloch C. O.
 (155) Henderson v Johnston Discontd.
 Shirley v Thompson C. O.
 McLeland v Irwin. Irwin Deft. G. R. & Issue.
 Madison v Barr. Deft. G. R. & Issue.
 Hamilton v Norris. Jno. Norris Deft. G. R. & Issue.
 Bruce v McMichael. Henry Heath Deft. G. R. & Issue.
 Campbell v Thompson. Wm. Vance. Deft. contd.
 Atkinson v Mathews C. O.
 Smallman v Such C. O.
 Brown & Brashers v Hamilton A. C.

Grand Jury Presentmts

Commonwealth v Persons.

v Davis
 v Fleming
 v Campbell
 v Lynn
 v McDonald.
 v McMahan
 v Christie
 v Boling
 v McKindley
 v Roberts negro
 v McAdams
 v Ohara
 v the Court discontd.
 v Hinch
 v Caston
 v Lindsay
 v Mary Lindsay
 v Pearcifull

contd.

	v Newkirk	
	v Carter.	
	v Hoagland	
	v Hull	
	v Williams	
	v Henry Hull	
(156)	Recognizances.	
	Common Wealth v Smith	
	v Springer & u.	
	v Steel	
	v Black	
	v Listnett	
	v Beall	
	v Bradley	
	v Winemiller	
	v Chambers	
	v Duncan	
	v Davidson	
	v Listnett &c.	contd.
	v McLean	
	v Ormsby	
	v Irwin	
	v Schley	
	v Hall &c	
	v Day	
	v Brawdy	
	v Dean	
	v Carr &c.	
	v Ross &c.	
	v Little &c	

Ordered that Benja. Vanater be allowed L 200 for his Expence & Services in going to Wms.burg for Shfs. Commission and other necessaries for the use of the Co't, to be paid out of depositum in the Shfs. hands if so much remain and if not the bal. to be Levied at the laying of the next Co'ty Levy.

(157) Isaac Taylor is allowed twenty two Dollars for bringing up the Acts of Assembly. Ordered that the Shff be directed to pay it.

Ordered that this Court be adjourned till Court in Course.

RICHARD YEATES.

At a Court continued and held for Yohogania County April 26th 1779.

Present John Cannon, Joshua Wright Isaac Cox Benjamin Kuykendall Gent. Justices.

Two Deed Poll John Miller to Peter Casnor. Ackd. & O. R.

Deed Poll Nevill to Pentecost. Ackd. & O. R.

Luther Colvin is appointed Surveyor of the Road from Pigeon Creek into the Road Leading from Perkerson to Zebuland Colvinings.

Joseph Beckett Gent. Present.

Ordered that Isaac Cox Gent pay to the Clerk his proportion of the money arising from the Sale of the Cards Sent to this Co'ty. for the use of the Soldiers wives and that he transmit it by the first opportunity to the Treasury.

(158) Administration of the Estate of Jacob Shadaker. decd. is granted Ezekiel Painther he having comply'd with the Law.

Ordered that Bazil Brown Otho Brashears Andrew Lynn & Thos. Brown be appointed to appraise the above Est.

Ordered that Court be adjourned till Tomorrow 9 OClock.

JOHN CANON.

Court met according to adjournment April 27th, 1779.

Present Edward Ward William Gowe Oliver Miller Joshua Wright John Canon Gent. Justices.

Deed Poll Froman to Pentecost. Ackd & O. R.

On Motion of Wm. Vance Ordered that his mark crop & slit in the left Ear and Slit in the Right with his Brand W. V. be Recorded.

Assigt. of a Warrant for 50 acres of Land Peter McCartney to John Campbell Esq. prov'd by Edwd. Ward and Andrew Heath two of the subscribing Witnesses thereto. Ord'd to lye for further proof.

George McCormick Sworn Shff for one month.

Deed G. Crohan to Edwd. Milne with the probat thereto annexed admitted to Record.

John Dousman Sworn D. Shff. for one month.

View of a Road from Fromans Mill into the Road leading from Pentecost's Mills to the Court House ret'd. and O. R.

Ordered that Hugh Brodie be appointed Surveyor of the said Road and that the Tithables within three miles do cut open & keep sd. Road in repair.

- (159) Ordered that William Dawlin an Infant be Bound to Danl. Thompson untill he arrives at the age of twenty one years and that the sd. Danl. teach the said Orphan or cause him to be taught to read the Engl. language and teach him the Art and mystery of Farming, and also teach him or cause him to be taught Arithmetic as far as the Rule of 3.

Richd. Swartick v Jacob Jones. discontd.

On the Petn. of Andrew Heath and others Ordered that Thos. Applegate Richd. Sparkes Jas. & Walker Wall or any three of them do view a Road from Wm. Andersons to Thos. Applegates and make retn. to next Court.

Ordered that Richd. Sparks Jas Wall & Walter Wall & Andrew Pearse Jun. do view a Road from the new store on Monongehala to the dividing Ridge Road near Jas. Wilsons & leading to Colo. Cooks.

Benjamin Kuykendal & Joseph Becket. G. P.

Patrick Clark v Thos. Perkerson. John Simon. S. Bl.

Zadock Wright v Elzat Hart. John Johnston S. Bl.

Inventory of Abraham Vaughan returned & Ordered to be Recorded.

John Lyda v Mordecai Richards. Enoch Springer S. Bl.

Jacob Bousman being appointed by an Act of Assembly to keep a Ferry from his Lands over the River Monongehala to the opposite Shore, and whereas the sd Jacob at the last May Court entered into a recog'ze. instead of bond, Ordered that sd Recog.ce. be set aside and that the said Jacob continue to keep the said Ferry agreeable to said act, and enter into Bond accord'g. to Law at the Next Court.

John James Wood sworn D. Shff. for one month.

Ordered that Hannah Frazier Orphan of John Frazer be bound to Wm. Anderson according to Law, and that she be taught to read the English language and also the Art & mystery of a Mantua Maker.

- (160) Jacob Shilling v Henry Newkirk.

Then came a Jury towit: Andrew Heath John Johnston Wm. Anderson Mordecai Richards Thos Hamilton John Guth-

ridge, Henry Hougland Andrew Vaughan Jas. Bruce John White James Patterson Andrew Powe.

Articles between Elijah Hart and Elenor Frazier Ackd. O. R.

Elizabeth Devior widow of Jas. Devoir came into Court and refused the provision made for her by her said husbands Will.

Articles between Elenor Frather Dinah Anderson Ackd. O. R.

Deed pool James Bruce to Wm. Marshall A'd. O. R.

Inventory and Sale of Lemin Davis's Est. retnd. & O. R.

Jas. Innis, Henry Taylor, James Scott on Millers Run, John Reed, of Millers Run, Wm. Campbell, Jas. Eager, Wm. McComes, John Duglass, William Bruce, James Marshall, Wm. Parker, & Hezekiah Magruder are recommended to his Excellency the Governor as proper persons to be added to the Commission of the Piece.

James Boyace v Paul Froman. Id. & Ord. Survey.

Laughlin v Hogland Order Survey.

Ordered that Court be adjourned untill Tomorrow Morning 9 OClock.

JOHN CANON.

Court met according to adjournment

Pres't. Benja. Kuykendall, Oliver Miller, Benja. Fry, Joseph Beckett, Gent Justices. Joshua Wright, Gent. Pres't.

(161) Issues to April Court 1779.

Joseph Cox	v John Williams &c.
John Lyd	v Joseph Cox
Joseph Wherry	v John White Sen.
Abraham Miller	v Mich'l. Humble.
Pentecost	v Jones &c. Judgt.
Johnston	v Swearengen
Brownlee	v Douglas
Shilling	v Newkirk
Same	v Same
Myers	v Hooper
Mitchel	v same
Shilling	v Fortner
Hooper	v Myers

		v G. Myers	
	Hoper	v Thomas &c.	
	Fullum	v Johnston.	
	Springer	v Kearsy.	
	Spear	v Jones.	} contd.
	Spear	v Winemiller.	
	Bousman	v McGoldrick	
	Ward	v Thorn	
	Ward	v Thorn	
	Pentecost	v Lynn	
	Same	v Briscoe	
	Shilling	v Taylor.	
	Hawkins, Ass'e.	v Clarke	
	Same	v Kuykendall	
	Eaton	v Kennon	
	Same	v McCleland.	
	Bond	v Mordicai	
	Same	v Same	
	Brodie, Ass'e.	v French.	
	Grub	v Dowlin	
(162)	Vallaudigham	v Tyart	
	Ward	v Thorn &c	
	Beeler	v Wells	
	Cook	v Froman	
	Same	v Shilling	
	Same, Ass'e.	v McConnell	
	McManomy	v Robertson	
	Semple	v McKinzie	
	Holladay Ass'e.	v Hawkins	
	Beall &c	v Finn	
	Same	v McMahan	
	Hamilton, Asse.	v Dunfield	
	Nevill	v Gist	
	Cresop	v Swearengen.	} contd.
	Campbell	v Bell	
	Fullum	v Johnston &c.	
	Same	v Same	
	Same	v McComish	
	Andrew	v Johnston, &c.	

	v the same	}
Decker	v Ruth	
Clarke	v Again	
Heath	v Bruce	
Burris	v Trapman	

Common Orders.

Washington v Martin { John Pearsall, Deft.
G. R. Issue. I'd.

Vance v McNew Judgt. W E.

Caldwell v Fry &c. N. G. w. leave. Issue.

Henderson v Kincaid discontd.

v Johnston Ord'd. Redocketed.

Morrison v Vannater contd.

v Benja Vannater. contd.

Bouseman v McGoldrick contd.

Hollady v Jones O. to be redock'd.

(163) Froman v Dean Judgt. W. E.

Croghan v McConnel

v Elrod

v Davidson

v Royall

v Keizer

v Conner

v Grant

v Gibson

v Hunter

v Whitsel

v Ross

v Thompson

v McCartney

v Ramage

} discontd.

Wm. & Benja Elliotts v Collins discontd.

Croghan v Ross

v Springer } discontd.

v Henry Do.

Hawkins, Ass'e. v Hanks Judgt. W. E.

v Zane Judgt. W. E.

Richards v Bowley Do.

Richards v Dodds Do.

Elliott v McIntosh	}	contd.
v same		
Bradley v Boleye		contd.
Curry v Wells		Impl.
Henderson v Evans	}	discontd.
v same		
Forrester v Murphy		Judgt. Ex.
Singers v McCulloch		Judgt. Issue. Ex.
Shirley v Thompson		Contd.
Atkerson v Mathews		Do.
(164) Smallman v Such		contd.
Whitesides v Girty		Judgt. W. E.
		Writs of Enquiry.
Hawkins	v Wheat	} contd.
Nelson	v Shilling	
Shilling	v Nelson	
Spivy	v Beeler	
McElroy	Judgt. L. 135, 15	
	v Templin	
	v same	
Hand	v Whitaker	
Boley	v Springer	
	v Jno. Springer	
	v same	
Ward	v Wells	
Cox	v Williams	
Vance	v Williams	
Ralston	v Lowry	
Henry	v Sloan	
Fry	v Felton	
	v same	
White	v Johnston	
Swigart	v Murphy	
Brashears, Admr.	v Brashears	
Noble	v Key	
	Alias Cap.	
McCormick v Hollis	P. C.	
Norris v Vineyard & ux	P. C.	
Lyda v Richards	Spl. Bl. Dist'd by Agmt.	
McGlaughlin v Woods	P. C.	

- Fife, Sen. v Tigart P.
 v same &c P.
- (165) Evans v Judy } P. C.
 v same }
- Bentley v Camp }
 v Vititoe } P. C.
 v Englin }
 v Warren }
- Workman, Ass'e. v Warren C. O.
- Johnston v Springer P. C.
- Johnston v Mills }
 Ritchie v Thornburg } P. C.
 Reno v Walker }
 v Isaac Walker }
- Clarke v Parkerson. Spl. Bl. Ind. N. D. Judgt. W. E.
 v Boley } P. C.
- Huffman v Leatherman }
- Williams Ass'e. v Anderson Impl.
- Tharp v Gray discontd.
- Fry v Ritchie Agreed.
- Murphy v Jourdan }
 v same } P. C.
- Brooks, Admr. v Roberts }
- Wright v Hart Spl. Bl. Implr.
- McCormick v Wilson }
 Munn v Crawford } P. C.
- McClelland v Beeler Implr. P. B.
- Norris v Embly P. C.
- Ross v Manning }
 Boling v Norris } P. C.
- Beavers v Mayhall discontd. N. Ap.
- Minor, Ass'e. v Blaz }
 Brien v Springer } P. C.
 McComish v same }
 Henderson v Evans }
- Molton v Seaburn C. O.
- McAdams v Devoir. Andrew Devoir, Deft. C. R. &
 Issue.
- Steel v Hamilton P. C.

(166)

Pleuries Cap's.

McMahan	v Hanks	} P. C.
	v Mathews	
Kearns	v Logan	
Miller	v Humble	
Springer	v Walker	} P. C.
Smith	v Gibson, Colo.	
Howe	v Genoway	
Schley	v McKindley	
Sumral	v Sumral	
Burns	v Loutherbach	
Whitsel	v Crawford	
Beans	v Johnston	
Harrison	v Hall	
Miller	v Mitchel	
	v same	
Barrackman	v Harry	
	v Woods	
Wagoner	v Rape. agreed.	
Vallandigham	v Walker	
McElwain	v Whitsel & ux.	
Wells, a minor	v Blackstone	
Lindsay	v Smith	
	v Hamilton	
Lentenburgher	v Holdcroft	
Labat	v Smith	
Pearce	v Evans	
Winebiddle	v Valentine	
Laughlin	v Brown	
Hazle	v McNew	
McDonald	v Slover	
Caldwell	v Thorn	

(167)

Kincaid	v Henderson	} P. C.
	v the same	
Riggs	v Corn	
Caldwell	v Mills	
Campbell	v Patterson	
Cummins	v Baggs	
Caldwell	v Wray	

Appearances.

- Innis v Sawins C. O. }
 v same C. O. } not to be sent.
- Rogers v Murphy A. C.
 v Manning A. C.
- Swearingen v Dougherty A. C.
- Boyer v Froman Impl.
- Mooney v Records Impl.
- Gibson v Meek A. C.
- Bromfield v Astergus No. Int. discontd.
- Gist, Asse. v Alexander A. C.
- McGlaughlin v Piggot A. C.
- McCoy v Rearden agreed.
- Caldwell v Tigart A. C.
- Ward v Phelps A. C.
- Allen v Boner A. C.
- Hall v Lynch A. C.
- v Fossett A. C.
- (168) Hall v Shearrer A. C.
 v Hatfield A. C.
- Protsman v Hill C. O.
- Heath v Stokes A. C.
- Chambers v Wallace A. C.
- Campbell v McKee. Ordered Sp. be published & G'd.
- McCrory v McCrory discontd.
- Innis v Scott. Hugh Scott, deft. O. R. & Issue.
- Hughes v McElry A. C.
- Waller v Hatfield Agd.
- Williams v Carter }
 v Brotsman } contd.
 v Stocker }
 v Stone }
- Brady v Williams. Jno. Wms. Deft. O. R. Issue.
- Hamilton v Swearengen A. C.
- McMahan v Tumbleston A. C.
- Campbell &c v Ward &c A. C.
- Boyer v Froman |
 v Froman |
 v Graham & ux |

v same	}	Implr.
v same		
v same		
v same		
v Atkins		

Gist v Cornwall A. C.

Boyce v Froman Implr.

Saml. Brewer v Peter Macy A. C.

Prottsman v Hill Implr.

- (169) Power of Atto. Jacob Shilling to Geo. McCormick ackd. and O. R.

Ordered that James Gray be sum'd. to answer the information of the States Atto. for ferrying over the River Monongehala & rec'd. 3 S. for the same cont'y to Law the following person at the following times..

Joseph Skelton & one horse March 27th, 1779.

James Bevard at the same time.

Danl. McClintock & one horse. 29th March 1779. 29 Pack Horses 27th March and took Rec't. for the same of David Kennedy. H. M.

Richd. Sparks & one horse 27th March.

Kuykendall v Hawkins N. G. & I'd.

Ordered that the Shff. Summon a Grand Jury.

John Gowe is appointed Const. in the room of John James Wood.

Andrew Pearce Jun. appointed Constl. Ord'd. that he take the Oath according to Law.

Ordered that Court be adj'd. till Court in course.

BENJA. KUYKENDALL.

- (170) At a Court Continued and held for Yohogania County May 24th, 1779.

Present Isaac Cox, William Gow, Joseph Beeler, Joseph Beckett.

George McCormick Sworn Shff.

Benjamin Vannater & John James Wood Sworn Deputy Sheriffs.

Andrew Scott Sworn Atto. at Law.

Deed Poll Dorsey Pentecost to Benjamin Mills two lots of Ground in the Town Louisburg, Ackd. O. R.

Deed Dorsey Pentecost to Jno. Canon Saml. McCullough Andrew Robinson & Ebenezer Zane Ackd. & O. R.

Deed James Astergus to Morgan Deshay proved by Nicholas Depue one of the subscribing Wit's. Ordered to ly for further proof.

Ordered that Danl. Applegate James Colvin, Hugh Braady & Joseph Lemin do view the most convenient way for a Road from Andrew Dye's to the Monongehala opposite the mouth of Mingo Creek, from thence to Fromans Mill, and make rept. &c.

Joseph Kilpatrick is recommended as a proper person to act as Ensign of the Militia.

Edwd. Ward and Benjamin Kuykendall Gent. present.

Power of Atto. Paul Froman to John McGee prov'd. by Isaac Cox and Benjamin Vannater & O. R.

Robert Johnston took the oath of allegiance & fidelity as prescribed by Law.

Two deeds Patrick Jourdan to John Fife proved by Dorsey Pentecost and Ralph Bowker two of the Wit's. Ordered to ly for further proof.

(171) Isaac Cox Gent. is allowed ten P. c't. as Adm. of the Est of Saml. Richardson decd. on the amt. of the value of sd. Est. Saml. Newel Gent. Prest.

Ordered that George Depue orphan of John Depue be bound to John Kincaid until he arrives to the age of twenty one years and that the said John Kincaid do teach or cause him to be taught to read the Bible, write and Cyphert he five Common Rules of Arithmetic.

Ordered that William Depue Orphan of John Depue be bound to John Read according to Law and that the sd. Jno. Read do teach or cause him to be taught to read & write and to cypher the five Common rules of Arithmetic.

Ordered that John Depue orphan of Jno. Depue be bound to Wm. Read according to Law and that the sd. Wm. do teach him or cause to be taught to read the Bible write and to cypher the five common Rules of Arithmetick.

Vincent Colvin took the Oath of Allegiance and fidelity as prescribed by Law.

William Rankin took the oath of allegiance and fidelity according to Law.

Then came a Grand Jury (towit) Charles Morgan Joseph Brown Jno. White Nicholas Dawson Richd. Boyce James Patterson David Ritchie Sampson Beavers Isaac Vance Nathl. Brown John Embly Wm. Renkins Vincent Colvin Sheshbazzer Bentley Michael Tigart Samuel Dunn Josiah Crawford Andrew Vaughan & Robt. Ramsay.

(172) Two Indentures Conrod Wrightner to John & Margt. Read prov'd & O. R.

Licence is granted to Francis Morrison to keep an Ordinary at his house he having complied with the Law.

Present Richd. Yeates Gent.

Licence is granted to James McGaldrick he to keep an Ordinary at his house he having complied with the Law.

On the motion of Nicholas Pease setting forth that he is desirous of erecting a Gristmill On Shirtees Creek on which he has lands on both sides but that he cannot do it without condemning an Acre the property of Joseph Edginton & Isaac Kenny, Ordered that the Sheriff do summon a Jury to attend on the premises to lay of and value the sd. Acre of Land and make their report to next Court.

Francis Morrison Sworn Lt. of the Militia. Comⁿ. Read.

Ordered that the Road from Thomas Applegates to Will'm. Andersons as returned by the viewers keeping along as the road is already opened, be confirmed. Thomas Applegate is appointed overseer of sd. Road and that the Tithables within three miles do cut open and keep sd. Road in repair.

Nichs. Depue v Duncan Hardin, Atta. prov'd. Judgt. & O. Sale.

Ordered that the wives of Greenbury Shous, Lem'l. Davis and John Depue poor soldiers in the Continental Service be allowed twelve pounds each.

(173) Ordered that Matthew Hindman's two children a soldier in the Continental Service be allowed twenty Shill's p. month each to commence from the first day of March last past and to be cont'd until March next.

Ordered that Eliza. Davis wife of Jonathan Davis a soldier in the Cont. Service be allowed eighteen pounds.

Ordered that Court be adjourned till tomorrow 8 OClock.

EDWD: WARD

Court met according to adjournment May 25th, 1779.

Present Edward Ward Richard Yeates Benjamin Frye
Benjamin Kuykendall, Isaac Cox Thomas Smallman Oliver
Miller Gentlemen Justices

Licence is granted to Willis Persons to keep an Ordinary at
his house he having complied with the Law.

Licence is granted to James Fleming to keep an Ordinary at
his house he having complied with the Law.

Present Sam'l. Newell & Joseph Beckett, Gent.

Abst. Thos Smallman. Prest. Joseph Beeler Gent.

Elizabeth Henry }

v

Sloan } Wm. Long undertook for the Defend-
ant that the Plt. should not be removed out of the County or
sold untill the trial of this Cause.

- (174) Ordered that a ferry be kept on the opposite side of the
River from Fort Pitt to Jacob Bousmans and that Jacob Bous-
man is appointed to keep the same he giving Bond with
Security according to Act of Assembly, and that he keep one
hand and Boat at his own House and a Boat and one hand on
the Pittsburgh Side constantly to attend and that in four
months from this Date he has a third Boat built and ready to
attend on either Side of the River.

Deed Ignace Labat to Jas. Chambers proved by Henry
Heth & Jacob Bousman two of the Subscribing Wit's. Or-
dered to lie for further proof.

Ordered that Samuel Newell be appointed to keep a ferry
over the River Monongehala from the new store to the opposite
Shore and that he keep one good Boat with Sufficient hands to
work her and that he give Bond with Security according to
Law at the next Court.

Present Thos. Smallman Gent.

Wm. Henry Spears v Joseph Jones. Then came a Jury
towit. Gabl. Cox John Decker Wm. Long Benja. Collins
John Crow Henry Hougland Uriah Johnston Andrew Devoir
James Wright John Springer Joseph Wherry Jno. Wall. Judgt.
for Plaintiff nine hundred pounds damages.

And'w. Pearce Thomas Applegate and Andrew Dye his
Security entered into Recog'ze. sd. Pearce in one thous'd.

pounds and his Securities in five hundred pounds each for his appearance at the next Court.

Thomas Crooks Sworn Capt. of the Militia. Com. read.

Michael Tegart sworn Lt. of Militia. Comn. Read.

Deed Saml. McAdams to Dorsey Pentecost Ackd. & O. R.

Deed Danl. Byers & David Miller to Dorsey Pentecost. Ackd. & O. R.

Deed Jas. Miller to Dorsey Pentecost Ackd. & O. R.

(175) Deed Thomas Miller to Dorsey Pentecost Ackd. & O. R.

Saml. McAdams Sworn Lieutenant of the Militia. Com. Read.

Ordered that Andrew Devoir be appointed Surveyor of the Road lead'g from the Ct. House to Pentecosts Mill from the top of the Ridge between the waters of Peters Creek and Shirtee opposite to the house of Henry Johnston.

Inventory of the Est. of Jas. Louden ret'd. & O. R.

Ordered that Jno. Decker Vincent Colvin Joseph Perkinson and Joseph Beckett or any three of them being first Sworn do lay of and assign unto Eliz^a. Devoir widow & Relict of James Devoir decd. her dower in the Lands Slaves & Personal Est. whereof James Devoir decd. died seized and make report to next Court.

Deed Moses Holladay to Saml. Irwin Ackd. & O. R.

Elizabeth Burris v Naomi Trapman. Then came a Jury towit. William Price David Andrews Mordecai Richards Hugh Sterling Abraham Miller Richard Crooks Henry Miller William Crow Richard Vaughan Basil Brown Thomas Lapsley & Robert Lowdon. Verd't. & Judgt for Plaintiff.

Mich'l. Tygert & Christopher McDonald being bound in Recog. appeared. Ord. to be Discharged.

Jacob Long sworn Ensign of the Militia. Com. Read.

Joseph Beeler v Benja. Wills. Then came a Jury (towit) Thomas Bond Samuel M.^cAdams Samuel Devoir Nicholas Christ John Johnston And'w. Dye Henry Spears John Bradley Nathl. Blackmore Wm. Fry John Hougland & Jacob Long. Ve't. for Plt. L 33.16 Debt one penny.

(176) John Spivy v Samuel Beeler. Then came a Jury (towit) Gabl. Cox John Decker William Long Benjamin Collins John Crowe Henry Hougland Uriah Johnston Andrew Devoir

James Wright Jno. Springer Joseph Wherry & John Wall. Verdt. & Judgt. for Plt. L. 135.15. Issue Exⁿ.

John Springer v Thos. Waller, referred to Geo. Vallandigham John McDonald Joshua Wright Jno. Canon Henry Taylor.

Ordered that Lemuel Davis and John Davis orphans of Lemuel Davis be bound to Isaac Cox according to law, the sd. Isaac Cox to teach or cause them to be taught to read write Cypher the five Com. Rules of Arithmetic.

Deed Patrick McCarmick to Moses Andrews proved Joseph Brown & Thos. Bond. Ord. to ly for further proof

The Grand Jury having found several Bills of Indt. ordered that the Persons be summoned.

Charles Richards v Jno. Boley. Michl Tigert Spl. Bl.

Assign't. Bill of Sale Sampson Beavers to Antho. Dunlavy. Ackd. & O. R.

Ordered that Court be adjourned till tomorrow 8 OClock.

EDWD. WARD.

Court met according to adjournment May 26th, 1779.

Present Edward Ward Isaac Cox Jno. Stevenson William Harrison Joseph Beeler William Crawford Gentlemen Justices.

(177) Edward Ward Isaac Cox John Stevenson Willian Harrison, William Crawford & Joseph Beeler Gent: took the Oath of Justices in Chancery.

Richie v Hall. Atta. Judgt. & P. S.

On the motion of Bazil Brown setting forth that he is desirous of erecting a Gristmill on Big Redstone Creek, Ordered that the Shff. do Summon twelve men of his vicinage to attend on the premises to lay of and value one Acre of Land on the opposite side of his Land, and value the damage done to the party holding the same, and make return to the next Court.

Joseph Kirkpatrick Sworn Ensign. Com. Read.

Joseph Beeler Jun. is recommended to his Excell'y the Governor as a proper person to serve as Ensign of the Militia.

Hooper v Thomas. Then came a Jury (towit) David Ritchie Henry Miller David Day Gab'l. Walker Isaac Walker John Crow David Andrew Abraham Miller Peter Rittenhouse Paul Humble Tobias Decker & Hugh Brodie, Verd'ct for plaintiff. Judgmt. for L 80. John Berry Mary Perry & Sussanna Perry. 4 days attendance in above suit.

Tobias Decker took the Oath of Allegiance and fidelity according to Law.

Prest. Saml. Newell & Benja. Fry Gent.

Absent Edwd. Ward Gent.

Jane Perry being bound in Recognizance appeared agreeable thereto and under protestation of Innocence Submits herself to the Court. On hear'g the Testimony ordered that the Deft. be fined five pounds.

Uriah Johnston Took Oath of Allegience and Fidelity.

(178) Deed Saml. Stockwell to Ezekiel Hopkins Ack'd. & O. R.

Benjamin Frye Gentleman Took the oath of Justice in Chancery.

Com. Wealth v Hugh Brodie. N. G & I. Join. & a Jury (towit) Gabl. Cox David Ritchie Henry Miller Gabriel Walker Isaac Walker John Crow David Andrew Abraham Miller Peter Rittenhouse Paul Humble Tobias Decker John Deane. Verdi't. Def'd. not Guilty.

Jane Ferrel held in L 50 and Joseph Skelton & Saml Irwin in L 25 each conditioned for her keeping the Peace towards the good People of the C. W. & peticular to Eli Collins till next Court.

Paul Matthews sworn Goaylor.

George McCormick Gent. protests agt. the Sufficiency of the Goal.

On the motion of Mary Lypolt the wife of George Lypolt, by her attorney, Seting forth that she cannot live with her Husband an acct. of Ill Treatment, Ordered that the said George Lypolt be summoned to appear at the next Court to (179) show cause if any why part of his Estate should not be applied for her seperate maintainence.

Campbell v Ward, Bousman & McGoldrick, Injun. Ordered that the Common Wealth Writ of Injunct. do Issue ag. the Defendants comm'g to stay Waste.

Ordered that Court be adjourned till tomorrow 8 O'Clock.

ISAAC COX.

(180) At a Court Continued and held for Yohogania County, May 27th, 1779.

Present Edward Ward William Crawford Benjamin Frye William Harrison John Stephenson John Cannon Gent Present.

Pluries Caps.

- McCormick v Hollis P. C.
Norris v Vineyard & Ux Impl.
McGlaughlin v Woods P. C.
Fife Sen : v Tigart Sp. Bl.
v the same Spl. Bl. Jno. Boley.
Evans v Judy agreed.
v the same agreed
Bentley v Camp agreed.
v Vititor P. C.
v Englin Impl.
Workman, Asse v Saltsman P. C.
Johnston v Springer C. O.
Johnston v Mills C. O.
Ritchie v Thornbury P. C.
Reno v Walker P. C.
v Walker P. C.
Clark v Bowley Impl.
Huffman v Leatherman Impl.
Fry v Ritchie agreed.
Murphy v Jourdan Abates by retn
Brooks, Adm. v Roberts Impl.
McCormick v Wilson agreed.
Munn v Crawford Impl.
Norris v Embly P. C.
(181) Ross v Manning P. C.
Boling v Norris Impl.
Minor, Asse. v Blazier P. C.
Brier v Springer Agreed & Settled.
McComish v Springer P. C.
Henderson v Evans P. C.
Steel v Hamilton P. C.
McMahan v Hanks P. C.
Kearns v Logan. P. C.
Miller v Humble Impl.
Springer v Waller referred.
Smith v Gibson P. C.
New v Genoway P. C.
Schley v McKindley discd.

- Sumral v Sumral &c agreed.
 Burns v Louterback P. C.
 Whitzel v Crawford P. C.
 Beans v Johnston P. C.
 Harrison v Hall P. C.
 Miller v Mitchel P. C.
 v The same P. C.
 Barrackman v Harry P. C.
 v Ross P. C.
 Vallandigham v Walker P. C.
 McElwaine v Whitzel & ux. dis'd. n. ap.
 Wills v Blackstone P. C.
 Lindsay v Smith P. C.
 v Hamilton P. C.
 Lintenberger v Holdcroft P. C.
 Labat v Smith P. C.
 Pearce v Evans P. C.
 Winebiddle v Valentine agreed.
 Laughlin v Brown P. C.
 Hazle v McNew Abates by Pt. Marriage.
 McDonald v Slover P. C.
 (182) Caldwell v Thorn P. C.
 Kincaid v Henderson &c. P. C.
 v The same &c P. C.
 Riggs v Corn discontd.
 Caldwell v Mills P. C.
 Campbell v Patterson P. C.
 Cummins v Baggs P. C.
 Caldwell v Wray P. C.
 v Thorn P. C.
 Wagoner v Rape agreed.

 Alias Caps.
 Gibson v Meek P. C.
 Gist, Asse. v Alexander P. C.
 McGlaughlin v Piggot P. C.
 Caldwell v Walgomot &c C. O.
 Curry v Wills C. O.
 Ward v Phelps Impl.

U. States v Matthew Boner discontd.
Hall v Lynch P. C.
 v Fossett P. C.
 v Shearer P. C.
 v Hatfield P. C.
Heath v Stokes P. C.
Chambers v Wallace P. C.
Gist v Cornwall Jr. P. C.
Forrester v Murphy P. C.
Mitchel v Pelton P. C.
Spears v Johnston Settled. Shff.
Waller v Springer C. O.
Miller v Pelton P. C.

(183) Appearances.

Nevill v Black C. O.
 v Thompson C. O.
 v Tharp C. O.
Stitt & ux v Williams A. C.
Crowe v Pearse A. C.
Henderson v Douglas A. C.
Wilson v Lynch &c A. C.
Evans v Russell A. C.
Stewart v Crawford G. R. Issue.
 v Harrison Do.
Shilling v Hinch A. C.
Casner v McIntire A. C.
Innis v Spencer A. C.
 Asse. v Hougland C. O.
Gilliland v Lynn Impl.
Shilling v Newkirk Impl.
Pentecost v Jones C. O.
Boley v Jourdan Abates by retn.
Stocker v Acklin A. C.
Day v Stanbury C. O.
Cook v Mayes A. C.
Bay v Jackson A. C.
Alexander v Steen A. C.
Dunagan v Boyce Impl.

- Riddeck v Ross A C.
 Wright v Beavers A C.
 Mitchel v Boley A C.
 McCollister v Corn Impl.
 McGruders v Lynn. A. C. discontd. Plt. Cost.
 Hamilton v Swearengen C. O.
 Campbel v Ward &c. G. R. Issue.
 Bond v Ervin A C
 Waller v Hatfield A C
 (184) McDowell v McComish A C
 Boley v Or. disd.
 Hughes v McElry A C
 McMahan v Tumbleston A C
 Henderson v Johnston C O
 Ellis v Marshall A C
 Brown & Brashears v Hamilton A C
 Holladay v Matthews C. O.
 Riggle v Dye. Andrew Pearce Spl. Bl. Judgt. by N. Dicit
 & W. E.
 Embly v Crowe Impl.
 Reed v Springer C. O.
 Hougland v Lock discontd. no appear.
 Boley v Manning A. C.
 v The same A C
 Penticost v Stephens discontd.
 Brewer & ux v Stacey A C
 Craven v Pearce Sen. A C
 Cook v Beckett A C
 Smallman v Guffee agreed.
 Spears v Beckett Ex. &c. A C
 Dye v Allen Tharp A C
 Nicholas v Conn A C
 Johnston v Alentharp A.
 Matthews v Ellis A.
 Nicholas v Day. Moses Holladay Sp. Bl. Impl.
 (185) Chancery.
 Crisop v Shearer B & Time
 Simon v McKee &c. contd till publication.
 Wills v Rearden contd.

Sci. Fac.

Lapsley v Read Oyer.

Brashears v Hamilton. Surrender of the Principal & I'd.

Baz'l. Brown v The same Do.

Ordered that Thomas Gist Thomas Warren Jno. Irwin of Pittsburg Matthew Richie & Dorsey Pentecost be appointed Comrs. agreeable to Act of Assembly as Judges of Counterfeit Money.

Ordered that John Allen Tharp & wife be sum'd. to appear at next Court to show cause if any why Elinor Humble orphan of Martin Humble should not be bound to Susanna Johnston, and the meantime the sd. Orphan remain with the sd. Johnston.

Henry Morrison v Benjamin Vannater. G. R. Issue.

George McCormick took the Oath of Allegiance and fidelity as prescribed by Law.

Ralph Bowker took the Oath of Allegiance and Fidelity.

Dorsey Pentecost Sworn Judge of Counterfeit money agreeable to Act of Assembly.

Day v Wilson Petn. C. O.

(186) Present Joseph Beeler & Joseph Beckett Gent.

Ordered that Thos. Tounsley an Orphan be contd. with Gabl. Walker agreeable to a former Order.

Ordered that Eve Sheek wife of a poor Soldier be allow L 18 for support of her self & two Children.

Order that the wife Abraham Ritchie be allowed be allowed the same that she was the last year to commence from the end of the last years allowance.

Wm. Downs being Sworn a Juryman on the Issue Join'd between John Decker Plaintiff and Davis Ruth Deft. absconded the Jury without bringing a Verdict. Ordered that he be fined twenty pounds.

Ordered that Court be adjourned till Court in Course.

EDWD. WARD.

(187) At a Court Continued and held for Yohogania County June the 28th, 1779.

Present William Goe Olliver Miller Joshua Wright Benjamin Kuykendall, Gentlemen Justices.

William Murley being recommended to his Excellency the

Governor as a proper person Ordered that he be appointed to serve as Lt. of the Militia in this Cot'y.

John Vannater appointed to serve as Ensign in the Militia for this County.

Present Samuel Newell Gentleman. Appraisement of the Estate Devoir decd retnd. by the Exr. and O. R.

Holladay v Brodie lef to the award of Wm. Marshall Jeremiah Johnston John Lemen & Wm. Anderson and their determination to be the award of this Court. Verd't. and Judgt. for plt. L 45. 15 s.

James Campbell sum'd. as a Grand Juryman and failing to appear on hearing his objections Ordered that the Sum's. be set aside.

Present Edward Ward Gent.

Charles Records appointed Surveyor of the Road whereof Andrew Devoir was formerly appointed.

Kinkead v Henderson. Saml. ——— Spl. Bl.

Ordered that Thomas Tounsley Orphan lately an apprentice to Isaac Walker be bound to Wm. Wm. Lee who is to teach him the Art and mystery of a blacksmith and also to teach or cause him to be taught to Read Write and Cypher the five common rules of Arithmetic.

(188) Day v Wilson. In Petn. dism'd.

John Reed being served with a Scire fac's. at the suit of Martha Lapsley, for a Judgment obtained against him by the said Martha on a declaration of Ejectment In May 1775, came into Court produced Mr. Benja. Kuykendall as Evidence that he had fee'd an Atto. and that he neglecting his duty the first Court Judgt. was obtained against him, unpresided the Court are of oppinion that the matter in dispute be deferred till the next September Court and that the parties attend With their Wit's. at that time to have a decisive hearing.

Inquisition held on the Body of ——— a Negro the property of James Hopkins from under the Hand & Seal of Wm. Goe Esqr. and the Jurors thereunto annexed was returned and O. R.

Ordered that Exn. agt. Wm. Downs for not appearing as a Juryman be deferred till next Court.

Ordered that the Common allowance be made for the children of Robert Crawford and Nich's. Hagarty poor Soldiers in

the Continental Service to commence from the 25th of September last.

Ordered that the Common allowance be given the Wife and Children of Thomas Southwait a poor soldier in the Continental Service to commence from the 25 of Sept. last.

Ordered that Jacob Bousman be appointed Surveyor of the Road from his house to the Widow Stewarts, Robert Henderson from thence to where the Road from the Widow Lapsleys & Jno Read's forks, Jno. Read from thence to Benja. Kuykendall's Mill, Thomas Lapsley from the forks of the Road to the Court House, and that the Inhabitants within three miles do keep sd. Road in repair.

(189) Berry v Crawford, C. O.

Ordered that this Court be adjourned till Court in Course.

WILLIAM GOE.

At a Court Continued and held for Yohogania County July 26th, 1779.

Present Isaac Cox Joseph Beckett Joshua Wright Benjamin Fry Gent. Justices.

John Cox appointed Surveyor of the Road in the room of James Wright.

Henderson v Douglass. Hugh Sterling Spl. Bl.

Wright v Beavers. D. Steel Spl. Bl.

Brodie v Same Do. Do.

Heth v Stokes Do. Do.

Boley v Orr. Sampson Beavers. Do.

Dye v Tharp David Williams Spl. Bl.

George Lypolt Ad. v Mary Lypolt Att. Jno. Prothman Spl. Bl.

Stocker v Acklin Hugh Brodie Spl. Bl.

Zadock Wright appointed Surveyor of the Road from opposite Elijah Harts to the Ct. House.

Ordered that the fine imposed on Wm. Downs for not appearing as a Jury man, Jno. Decker v David Ruth, be remitted, he having given the Court satisfactory reasons for his non attendance.

(190) Berry v Andw. Crawford & Asse.—Bl. Judgt. L. 30. & costs.

Ordered that Court be adjourned till Court in Course.

ISAAC COX.

At a Court Continued and held for Yohogania County
August 23d, 1779.

Edward Ward Isaac Cox Saml. Newell Joseph Beckett John
McDonald Benja. Kuykendall Gent. Justices.

Wm. Murly Sworn Lt. Comn. Read.

Jno. Vannater Sworn Ensign. Comn. Read.

Deed Jediah Johnson to John Douglass Ackd & O. R.

Deed Jediah Johnson to Andrew Devoir Ackd. & O. R.

Springer v Waller. Henry Kersy Spl. Bl.

Deed Thos. Spencer to Saml. Heth Ackd. & O. R.

Deed Benjamin Vannater to Robt. Bowers Ackd. & O. R.

James McCullough v Jno. Taylor. Thos. Pritchard,
Spl. Bl.

Release Saml. McAdams to Andrew Devore ackd. & O. R.

Andw. Devoir v Jediah Johnson. Agreed.

Thomas Parkeson v John Megee Non Suit.

Do. Do. Do.

(191) Andrew Heth Sworn Goaler for one month.

Geo. Vallandigham v Gabl. Walker. Ordered that Didi-
mus Issue for the Exn. of John and Francis Reno.

Absent Isaac Cox.

David Steel v James Hamilton, John McComish Spl. Bl.

Lindsay v the same. Benja. Vannater Spl. Bl.

Acct. preferred by Saml. Newell & Benjn. Kuykendall
L 472 for building the Ct. House and repairing the old Gl.
approved of by the Court, Ordered that the Sheriff pay the
same.

Deed Isaac Cox to Andrew Nigh Ackd. & O. R.

Ordered that this Court be adjourned till Court in Course.

EDWD. WARD.

At a Court held for the Examination of John Bryan who
stands charged with feloniously stealing a horse the property
of George Shannon.

Present Isaac Cox Benja. Kuykendall Oliver Miller Joseph
Beckett Joshua Wright Samuel Newell.

The prisoner being set to the barr and it being demanded of
him whether he was Guilty or not Guilty, answered Not Guilty.
Whereupon Sundry Witnesses were examined, on consideration
whereof and the circumstances it is the opinion of the Court

that he is not guilty but that he is a person of bad character, and therefore that he give Security for his good behaviour for three years himself L 1000 and his two Securities L 500 each.

(192) At a Court held for Yohogania County September 27th, 1779.

Present Isaac Cox John Canon Joseph Beckett John Freeman Joshua Wright Oliver Miller Richard Yeates Gentlemen Justices.

Power of Atto. David Cox to Friend Cox. ackd. & O. R.

David Levinston ————— acknowledge themselves indebted &c the said David in the sum of L 400 and the said ————— in the sum of L 200 each, Cond'd. for the personal appearance of the sd. David at the next G. Jury Ct. to answer a charge exhibited agt. him for stealing a saddle the property of Robt. Henderson &c.

Administration of the Est. of Saml. Griffith decd. is granted to Elizabeth Griffith she having complied with the Law.

Ordered that Thomas Prather, John Purdie Robert McKie & Rich. Noble or any three of them are appointed to praise the sd. Est.

Ordered that Alexander Ewing an Infant and Orphan of Willm. Ewing decd. aged nine years old be bound to Thomas McMullin according to law, and that the said Thos. do give the said Alexander a new Bible and L 10 at the Exp'n. of his time.

Robt. McGlaughlin &c. v Tobias Woods, Mabara Evans Spl. Bl.

(193) Ordered that William Hammond an Infant and Orphan of John Hammond decd be bound to Joseph Scott according to Law, and to find him one Ax one Grubbing Hoe and one Bible at the expiration of his time.

Ordered that Sarah Hammond aged seven years be bound Infant and Orphan of John Hommond decd be bound to Joseph Scott according to Law and the said John to give her one Cow and Calf one Spining Wheel and Bible at the expiration of her time.

Ordered that this Court be adjourned till tomorrow 8 o'clock.

ISAAC COX.

Court met according to adjournment Sept. 28th, 1779.

Present Wm. Harrison Thomas Freeman Oliver Miller
Richard Yeates Gent. Justices.

Administration of the Estate Timothy Hays is granted to
Augustine Moore he having complied with the Law.

Ordered that Philip Shute Thomas Rodgers Richd. Waller
& Saml. McLain do appraise the sd. Est.

Administration of the Est. of Wm. Noland is granted to
Augustin Moore he having complied with the Law.

Ordered that Philip Shute Thomas Rodgers Richd. Waller
& Saml. McLain do appraise the said Est.

- (194) An Order of Monongehala Court for appointing a Com-
mittee of three to draw up a remonstr. to the Genl. Assembly
of Virg'a. praying a repeal of the Law for opening a Land
Office & appointing Commrs. to take in entries of Land on
the West of the Laurell Hill, was laid before the Court at the
request of the Court of Monongehala; upon seriously con-
sider'g the same & the consequences of repealing those Laws,
Ord'd. that the sd. Ct. of Monongalia be informed that this
Court cannot by any means concur with the sd. Ct. in wishing
those Laws to be repealed as they cannot but consider them as
exceeding well adapted to the Local circumstances & Situation
of the People of this County: so far from wishing a repeal of
those Laws this Court are determined to take every Method in
their power to prevent it.

Present Isaac Cox, Gent. & John Canon, Gt.

Absent Thomas Freeman.

Ordered that Thomas Ashbrook be appointed Surveyor of
the Road from Cat Fishes Camp half way to Pentecosts Mills
and John McDowall the other half, and that the Tithables
within three miles do work on and keep the sd. Road in repair.

Absent Wm. Harrison.

Ordered that Jno. Crawford be sum'd. to appear at the next
Court to shew by what authority he detains James Crago as
his Servant.

Colo. Wm. Crawford came before the Ct. and made Oath
that Hugh Stephenson now decd. obtained a Warrant from
Lord Dunmore while Governor of Virga. for three thousand
Acres of Land & that the sd. Hugh Stephenson was an Inh't.

of Virginia & that he was a Captain of a Company actually raised in Virg'a. & and in the Service of Virg'a. in the year of Boquet's Campaign 1764, & the said Crawford further made (195) oath that he was a witness to the sd. Hugh Stephenson's assigning to a certain Richd. Yeates one thousand Acres of the said Warrant.

William Crawford came before the Court & made Oath that Burton Lucas was a Subaltern Officer in the Service of Virg'a. in Colo. Wm. Byrds Regt. in the year 1758 or 59 in consequence of which he obtained a Warrant from Lord Dunmore while Gov. of Virg'a. for two thous'd. Acres of Land which was assigned by the sd. Lucas to Matthew Ritchie & Wm. Bruce.

Prest. Benja. Kuykendall & Joseph Beckett Gent.

Deed Labat to Chambers prov'd. by the Oath of Wm. Christy O. R. being formerly proved by the other subsc. Witnesses.

Andrew Swearengen gentleman Present.

Deed Edwd. Ward to Jacob Haymaker ackd. by sd. Ward. O. for R.

Two Deeds James McGoldrick to Edwd. Ward ack'd. O. R.

Deed Edwd. Ward to McGoldrick ackd. O. R.

William Crawford Gent. Sworn Surveyor.

Appraisement of the Goods Chattles and Credits of the Estate of Archibald Wilson deceased return'd order for Rec'd.

Deed Ed. Ward to James Freeman. Ackd. O. R.

(196) Manuel Gollehar being bound in Recognizance Ordered to be Discharged.

Administration of the Estate of Solomon Froman granted to Mary Froman, she having complied with the Law.

Ezekiel Hopkins, John Hopkins, Nicholas Devoir and Leventon Thomas, are appointed appraisers to sd. Estate.

Deed, John Johnston to John Hopkins prov'd. Or. for Record.

Ordered that James Chambers be bound in Recog'ze. L 500 and Samuel Irwin his Sec'ty. in L 25 for his appearance of the said James Chambers at the next G. Jury Court.

Aaron Williams took the Oath of Allegiance & fidelity. paid.

Samuel Beeler v Josiah Scott. Jno. Allen Spl. Bl.

Acquilla Whitaker took the oath of Allegiance and fidelity.
paid.

Present Thomas Freeman Gent.

John Boley v Corn v Maning. Jno. Fife Sen. Spl. Bl.

Deed Ezekiah Applegate to Thomas Spencer acknowledged
& O. R.

David Levesterton bound to the next Grand Jury Ct. held
in L. 600, Benja. Collings & Saml. Irwin Secy's. held in L
300 Each.

- (197) Ordered that Mary Guen the wife of Thos. Guen a poor
Soldier in the Continental Service be Allowed 40 S. p. month
for the support of herself and one child, to comm'ce the 28th
of March Last, and to End the 28th of March Next.

Ordered that Joseph Pearce son of Elisha, be app'd. con-
stable to serve the Ensuing year in the place of Benjamin
Philips.

Decker v Jacobs, refered to James Wright, Joseph Perkerson
& Saml. Devoir.

Ordered that Ct. be adjourned untill Tomorrow morning 9
oclock.

BENJA. KUYKENDALL.

Court met according to adjournment September 29th. 1779.

Present Edwd. Ward, William Crawford, Thomas Smallman
William Harrison, and Thomas Freeman, Gent. Jus.

Licence is Granted to Robert McKindley to keep an Ordi-
nary at his house for one year, he having complied with the
Law.

Ordered that Josias Crawford Thomas Lapsley Jediah Ash-
craft & Richd Crooks, to view a Road from Pentecosts Mills
to McKees Ferry near the mouth of Yough and make a return
of the Convenience & Inconvenience to next Ct.

Licence is granted to John Farree to keep an Ordinary the
Insuing Year he having Complied with the Law.

Ordered that the Sheriff Summon a Jury of twelve Men to
condemn an Acre of Land the property of Wm. Black in fav'r.
John Armstrong where he is now Building a Mill.

- (198) Ordered that 40 S. pr. month be allowed the Wife of Francis
Holland a poor Soldier in the Cont'l. Service for the support of

herself and one child to commence the 28th day of last March and to end the 28th day of March next.

Ward to Heth. Deed ackd. & O. R.

Present Benjamin Kuykendall, Gent.

Robert McKindley & James Fleming appointed Constables for the ensuing year.

Robt. McKindley sworn Const'l.

Ordered that John Goe be attached for not Swearing in as Constable.

Absent Wm. Harrison, Gent.

Geo. Berry v Andw. Crawford. Ord'd. that the Judgt. be set aside and Judgt. opened & Redocketed.

Ordered that Philip Whitsel be summoned to appear at the next Court to shew cause why he detains Patience York as a Servant and that she be committed to the care of Thomas Smallman till the next Court.

Inventory of Val. Crawfords Est. Retd. & O. R.

Wills v Quick Moses Holladay Spl. Bl.

Joshua Wright & Joseph Beckett, Gent. Prest.

(199) Henry v Slone, T. A. B. Then came a Jury Towit : Gabriel Cox, John Brown, Joseph Perkerson, David Andrews, Samuel Devoir, Moses Holliday, Uriah Johnston, Thomas Applegate James Wright Robt. McKey John Dean James McGee. Judgmt. for plaintiff L 15 & Costs.

Prest. Samuel Newell Gent.

Ordered that Susannah Harmon be bound to Samuel Newell Gent. according to Law.

Hugh Orra v Peter Branden. In Attachm't. Judgmt. for L 84.9.5 & Costs, & order of Sale.

Cox v Williams & Irwin. Then came a Jury towit. John Robertson, John Hopkins, Zekiel Hopkins, Michl. Humble, Jno. Quick Ezekl. Bernard, Adam Alex^r. James Vannater Hezekiah Applegate Charles Records Jno. Collins Abraham Miller. Verd't. & Judgmt. for plaintiff L. 50. Costs.

Crow v Dye. Saml. Devoir Spl. Bail.

Marshall v Huff ag'd.

Deed Pentecost to Records. ackd. O. R.

Absent Thos. Freeman, Gent.

(200) Ordered that Colo. John Cannon have the publick salt

that the said 110 is a duplicate brought up to this County
by the said 110 to the Sheriff's Office to receive it, and that
he is authorized to continue to the Sheriff on such terms as
he may think best in the discretion to fix the price to be
paid for the same on the basis of the Original Cost. Cal.
St. 10, Section 10000.

I think that Sam Thompson may be authorized to have
 the "Black Sea" now lying at Sam Thompson's in London.
 I have written to him in the same connection.

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$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

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1. The first part of the text discusses the importance of maintaining accurate records of all transactions, including sales, purchases, and expenses. It emphasizes that proper record-keeping is essential for determining the correct amount of tax liability.

1. The first group of people who are not in the labor force are those who are not in the labor force because they are not in the labor force.

1. The first part of the document is a list of references. The references are listed in two columns. The first column contains references to books and articles, and the second column contains references to books and articles. The references are listed in alphabetical order.

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Figure 1: Schematic representation of the experimental design. The diagram shows a sequence of events: 'Stimulus' (a box with a question mark), 'Response' (a box with a question mark), 'Feedback' (a box with a question mark), and 'Outcome' (a box with a question mark). Arrows indicate the flow from Stimulus to Response, Response to Feedback, and Feedback to Outcome. A feedback loop arrow connects Outcome back to Stimulus. The entire process is labeled 'Experiment 1'.

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Figure 1 is a schematic representation of the experimental design. It shows a sequence of four boxes connected by arrows: 'Stimulus presentation' (containing a question mark), 'Response' (containing a hand icon), 'Feedback' (containing a checkmark), and 'Outcome' (containing a question mark). The flow is from Stimulus presentation to Response, then to Feedback, and finally to Outcome. A feedback loop arrow returns from Outcome to Stimulus presentation.

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Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the control group (CG). The EG was divided into two subgroups: the experimental group (EG) and the experimental group (EG). The subjects were divided into two groups: the control group (CG) and the experimental group (EG). The CG was divided into two subgroups: the control group (CG) and the control group (CG). The EG was divided into two subgroups: the experimental group (EG) and the experimental group (EG).

Parsons v Edwards Do.
 Ormsby v Dunn Do.
 Harrison v Wallace Do.
 Ogile v McInnis Do.
 Chase v Brandon Trial for def. per. of.
 Cox, Adams v Nelson Granted.
 Ritchie v Hall Do.
 Legue v Hardin Judge.
 Lynde v Lynde agreed.

Lynn.

Cox, Trial v Williams Do.
 Lynde Do. v Cox Judge.
 Wherry v White Granted.
 Miller v Housh Do.
 Johnson v Swearingen
 Brownlee v Douglas Granted.
 Stilling v Newkirk Do.
 v the same Do.
 Myers v Hooper Do.
 Mitchell v same Do.
 Stilling v Forner Do.
 v Myers Do.
 Hooper v Gen. Myers Do.
 Fulton v Johnson Do.
 Springer v Hensley Granted.
 Spear v Winchell Granted.
 Bowman v McGoldrick Granted.
 Ward v Thorn Jry.
 v Same granted.
 Pentecost v Lynn
 v Same granted.
 Stilling v Taylor Do.
 Hawkins Assn. v Clark Granted.
 v Hays Do.
 Eason v Keson Insured.
 v McDaniel Do.
 Bond v Mordecai Judge by default L. 1812 182 Hs. Feb'ry.
 & 183
 v same Do. L. 1812 182 Hs. Feb'ry. 183.

- Brodie, Asse. v French Discontd
 Grubb v Douling Judgt. by default.
 Vallandigham v Tigart Discontd
 Cook, Asse. v McConnel Do.
 McManamy v Robertson Do.
 Semple v McKinzie contd.
 Holladay, Asse. v Hawkins. Plea waved & Judgt.
 Beal v Finn &x contd.
 v McMahan Do.
 John Nevill v Gist. Plea waved & Judgt. Inqu grant.
 Hamilton, Asse. v Dunfield Discontd.
 Cresop v Swearengen contd.
 (203) Campbell v Bell contd
 Fullum v Johnson &x }
 v same } contd.
 v McComish }
 Andrew v Johnson &x Do.
 v same Do.
 Decker v Ruth
 Clark v Again
 Heth v Bruce contd.
 Christy v Heth Do.
 v same Do.
 Froman v Boyce
 Campbell v Thompson
 Bruce v McMichael
 Madison, Jun. v. Dunbarr
 McLeland &x v Irwin
 Hamilton v Norris
 McAdams v Devore agd.
 Innis v Scott
 Brady v Williams &x
 Washington v Pearsall.
 Caldwell v Fry contd
 Jones v Spears
 Williams v Shane
 v Protsman
 v Carter
 v Stocker

Stuart v Crawford
v Harrison

(204)

Common Orders.

Innes v Sawins
v same
Morrison v Vannater N. G. & l'd.
Bousman v McGoldrick
Elliott v McIntosh W. E. Judgt.
v same Judgt & W. E.
Bradley v Boley N. G. with leave.
Curry v Wells Do.
Shirley v Thompson Non. Assr.
Atkinson v Matthews Judgt.
Smallman v Such W. E.
Bentley v Warren Agd.
Morton v Seaburn Agreed.
Innis, Ass'ee v Hougland
Day v Stansbury Judgt. W. E.
Johnson v Lindsey contd.
Do v Mills Do.
Waller v Springer N. G.
Nevill v Thompson
v Sharp
v Blackburn
Caldwell v Tygart & x Judgt.
Holladay v Matthews Judgt.
Henderson v Johnson
Reed v Springer Judgt L. 37. 10 S. 170 L & 40 S.
Embley v Crowe N. G. w. Leave and Issued.
Hamilton v Swearengen

Writs of Enquiry.

Hawkins v Wheat contd
Nelson v Shilling discontd.
Shilling v Nelson Do.
McIlry v Templin }
v The same } contd
Hand v Whitaker Discontd.

- Boley v Springer N. G. w. leave & I'd.
 v Jno. Springer Do.
 v same Do.
 Ward v Wills N. G. w. Leave & I'd.
 Cox v Williams
 (205) Vance v Williams N. G. w. leave & I'd.
 Ralston v Lowry contd.
 Henry v Sloan Trial.
 Fry v Filton contd
 v Same Do.
 White v Johnson Do.
 Swigart v Murphy Do.
 Brashears Admor. v Brashears Do.
 Noble v Kuyd'l. discontd.
 Whiteside v Girty Contd.
 Riggle v Dye N. G. w. leave & I'd.
 Richards v Boley contd.
 Hawkins v Zane discontd.
 v Hanks Do.
 Froman v Dean contd.
 Vance v McNew
 Lyda v Richards Settled & discontd.
 Clark v Parkeson contd.
 References.
 Briscoe v Todd Discontd.
 Connel v Mounce Do.
 Reasoner v Ruth. Judgt. 375 Tob'o & 40 S. paid.
 Boling v Morrison discontd.
 Wills v Newell Do.
 Gist v Waller Judgt. W. E.
 v Hall Judgt W. E.
 v Boyles Do.
 Burrows v Johnson Abates.
 Sly v McKindley discontd.
 Bradon v Vannator Do.
 Richards v Ross Do.
 Brownfield v Same Do.
 Custard v Long Do.
 Swassicks v Jones Do.

- Pearse v Evans N. G. w. leave & I'd.
Murphy v Richards Discontd.
Hayes v Deal Do.
Ewalt v McCollister Do.
(206) Hougland v Laughlin N. G. w. Leave & I'd.
Swassicks v Swassicks discontd.
Newkirk v Shilling Do.
McFarlane v Beeler. Judgt. \mathcal{L} 22. S 11. 287 Tobo. & 40 S.
Andrew v Johnson
Matthews v Marshall &x. Judgt.
Cox v Breetsman. N. G. w. leave & I'd.
Vannator v Bradon Discontd.
v Parkeson N. G. w. leave & I'd.
Burrows v Williams Abates.
Jones v McDonald discontd.
Dawson v Kirkpatrick N. G. w. leave & I'd.
Hall v Wells &x discontd.
Grimes v Logan Do.
Beeler v Walker Judgt. W. E.
Woods v McKee discontd.
Morrison v Swigart Do.
Froman v Boyce. N. G. w. leave & I'd.
Deal v Hays Discontd.
Crooks v Hougland. N. G. w. leave & I'd.
Pearse v Evans Do.
Wallace v Duncan discontd.
Tygart v Boley. N. G. w. leave & I'd.
Boyce v Froman &x Do.
Tigart v Chamberlain Judgt W. E.
McKy v Davison Do.
v Same Do.
v Same Do.
Mallocks v Brown discontd.
Brown v Mallocks Do.
Lyda v Collins Do.
Caldwell v Hougland N. G. W. leave & Issued.
Whitsel v McElwane Do.
Caldwell v Corn Do.
Chamberlain v Henthorn discontd.

- Spears v Proctor Do.
 v Gist I. W. C.
- (207) Cregghan v Waugh contd.
 Newell v Robeson contd.
 Shilling v Young discontd.
 v Same Do.
 v Demink Do
 v Procter Do.
- Nevill v Wiseman contd.
 Shilling v Martin Discontd.
 Sly v Smith Do.
- Spear v McMahan N. G. w. leave & I'd.
 Blackburn, Asse. v Peak Discontd.
 Conrod v Carter Do.
 Wood v Griffith Do.
 Rogers v Proctor Do.
- Clinton & Noble v Brashears. Judgt. by Default. L 4 19.
 & $\frac{3}{4}$ & 40 S.
- Wagoner v Warner Discontd.
 McGrew v McConnel Do.
 v Phelps Do.
- McMahan v Irwin Do.
 McChandlis, Asse. v McComish Do.
 Moor v Richmond Do.
 Smallman v Slover Do.
 Virgin v Moore Do
 Barker v Jourdan Do.
 Redford, Asse. v Hill Do.
 Armstrong v Ramage Do.
 Wilcox v Craighead Do
 Barrackman v Shively Do
 Reasoner v Shearer Do.
 Ramsay v Chambers & Co. Do.
 v The same Do.
- Heth v Farree Do.
 Perkin v Colloway Do.
 Hugby v Thomas Do.
 Stephens v Shilling Do.
 Downer v Teagarden Do.

- (208) Thomas v Lee Discontd.
Wilson v Croghan &x Do.
Brownfield v Cox Do
Bond v Long. Judgt. by default L. 20 Costs 117 lb Tobo.
& 40 S.
Tigart v Dunnavan Discontd.
Caldwell v Browster Do.
Sumral v Same Do
Shearer v Miller Do
Baker v Hendricks Do
Whitaker v Dixon Do
Witsel v Shearer Do
Gollihar v Dowlin Do
Stephens v Stout Do
McMullen & ux v Parkeson &x Do
v Same Do.
Moore v Virgin Do
Dodd v Virgin Do
v same Do
Moore v Virgin Do
Boyce v Philips Do
Campbell v Brownfield Do
Harrison v Karr Do
Jones v Clarke &x Do.
Phelps v McGrew Do.
McMichael v Frinch Do.
Purcel v Gibson Do
Halfpinny v Whitsel Do
Thomas v Merchant &x Do
Ireland v Wilson Do
Collins v Brady Do.
Black, Asse. v Dunlavy Do
Vaughan v McMahan Do
Stephenson v Reed &x Do.
Small v Gray Do
Holladay v Jones. Judgt. by default.
Tidball, Asse. v Shaner discontd.
Anderson, Asse. v Huey Do
Stephenson v Barnett discontd.
- (209)

Grag & Harrison Do

Graham & Baker

- McLanahan
- Buchanan
- McKee
- Richmond
- Winaker
- Herman Winaker
- Jas. Winaker
- Kuykendall
- Frederick
- Butler
- McLean
- Boussman
- Gentes
- McGrew
- Tracy
- Smasick
- Meek
- McManis
- Drummond
- Campbell
- Myers and
- Gibson
- Weddel, Sen.
- Beard
- Morice
- Miller
- Gensler
- Reno
- Elliot
- Price
- Loudon
- St. Clair
- Loudon

Do

St. Clair & Adams Do

Clark & Tebbell Do

Epler & Adams Do

Gabagan & Smith Do

- Enoch v Teagarden &x. Do.
 Clinton v Mays Do
 Hawkins v Humble Do
 Fife v Churchill Do
 Hite v Morgan Judgt. by default.
 v White Do
 v Evans Do
 v Mynett Do
 v Defebaugh Do
 v Same Do Exn.
 Bruin v Fife Do
 v Same Do
 v Same Do
 v Same Do
 Hales v Roatch Judgt. W. E.
 Morgan v Nichols discontd.
 v Bond Do
 v Chamberlain Do
 v Bever Do
 Price v Lynn Judgt. by default.
 v Weddel discontd.
 v Hanks Judgt by default.
 Gray v Peton discontd.
 v Same Do.
 Tigart v Dunavan Do
 v Craven. Do
 v Vannator Do
 v Craven Do
 v Oglin Do.
 St. Clair v Sills Do.
 Elliott v Girty Do.
 Hawkins v Parkeson Do.
 Robison v Crow Do.
 (212) Shilling v Newkirk Discontd.
 Rodgers v Williams &x Do.
 v Parr Do.
 v Tumbleson Do.
 Zane, Asse. v Holman Do.
 Castleman v Tabor Do

Lyon v Duncan Do
Hosier v Bruce Do
Glassell v Kizer Do
McGlassen v Young Do
Anderson v Rees Do
Dunlavy, Asse. v Ferrel Do
Armstrong v Ohara Do
Thomas v Stark Judgt. by default.
Ward v Springsteel discontd.

v Same Do.

Jones v Evans Do.
v Same Do.
v McGoldrick Do.
v same Do

Ogle v Wilson Do
v same Do.

Labat v Ramage Do.
Hamilton &x v Goe Do.
Clendening v Logan Do.
Nevill, Asse. v Holladay. Conditions perf'd. & contd.

Keiser v Jamison discontd

Kelso &x v Piggott Do.

Allison v Lyon Do.

Smith v Douglas Do

Martin v Elliott Do

Brecken v Cassat Do

Jones v Ormsback Do.

Wafords, Exrs. v Cox Do

Roots v Cook Do.

(213) Caldwell, Asse. v Lynn Agreed.

Kidd v McConnel Judgt & W. E.

Linch v Jones Do
v Bosnick Do.

Dunning v Bay Do.

Bradon v Elliott Do.

Crooks v Hilderbrand. Judgt. by default. L 4.5 160 lb.

Tobo. 40 S.

Johnson v Steal discontd.

Hamilton v Martin Do

- Berwick v Atkison Do.
 Gilfillian Asse. v Tigart Do.
 McInty v Gray Do
 McCollister v Scott Do
 Boley v Tigart Do
 Robeson v McGoldrick Do
 McElroy v McMahan Judgt. W. E.
 Atkison v White discontd.
 Price v Crawford Do
 Wheat v Carmichael Do
 Scott v Vallandigham Do
 Campbell v Hanks Do
 Holaday & Co. v Stout & x. Abates, D. D.
 McCarty v Craighead discontd.
 Lyon v Humblebearer. Judgt. by def't. L 37 10 160 lb.
 Tobo. & 140 S.
 Frazier v Chambers discontd.
 Miller v Hill Do.
 Karnes v McQuin & x Do.
 Boyd v Thomas Do
 Wright v Springstone Do.
 Davidson v Hanks Do
 Walker v Dristnell Do.
 Clark v Hawkins Do
 Smith v Girty Do
 Dillon v Perky Do.
 McManamy v Ohara Do.
 Richmond v Scott Do.
 Ferrel v Dougherty Do.
 Tharp v Collins Do
 (214) Armstrong v Ohara Discontd.
 Bousman v Ormsby Do.
 Thomas v Elliott, Admr. Do.
 Christy v White Do.
 Brinkers, Exr's. v Hardin's Adm'ors. Judgt. by def't.
 Davis & Co. v Young. Judgt. by def't.
 Elvy v Dunn discontd.
 Lyon v Downer Do.
 Mitchel v Wade. Judgt. by def't. Process not served.

Wilson v McGinnis discontd.
 Johnson v Stephens Do.
 Wilson v Canon Do
 Williams v Presser do
 Croghan v Powel do
 Hite v Dodson. Judgt. by def't. Process not served.
 Ormsby v Bousman discontd.
 Dunlavy v Robertson Do
 Brashears, Admor. v Colvin Judgt. by def't.
 Patterson v Tidball Judgt W. E.
 Day v Dean N. G. w. leave & Joind.
 Bever, Asse. v Cook &c. Admors. discontd.
 Beeler v Ink N. G. w. leave & I.
 Kersy v Springer ref'd.
 Cox v Anderson agreed.
 Crawford v Hamilton discontd.
 Williams, Asse. v Anderson Do.
 Wright v Hart. N. G. w. leave & I'd.
 McClelland v Beeler discontd.
 McMahan v Matthews Judgt. W. E.
 Boyce v Froman N. G. w. leave & I'd.
 Mooney v Records N. G. w. leave & I'd.
 Boyce v Froman Non. Asst. & I'd.
 v same Do
 & ux v Graham }
 v same }
 v same } Discontd.
 v same }
 v same }
 v Atkeson Judgt. W. E.
 v Froman N. G. w. leave & I'd.
 Protsman v Hill Judgt. W. E.
 (215) Norris v Vineyard & Ux Judgt W E.
 Fife v Tigart. &x Judgt. W E.
 v same Do.
 Bentley v Eaglen Do.
 Clark v Boley Do
 Huffman v Leatherman Do.
 Munn v Crawford Do.
 Boling v Norris N. G. w. leave & I'd.

Miller v Humble Cond's perform'd. & P'd.
 Gilliland v Linn N. G. leave & P'd.
 Shilling v Newkirk Do.
 Dunagan v Boyce Agd.
 McCollister v Corn Judgt. W. E.
 Ward v Philps. Discontd.

Petitions

Sills v Irwin discontd.
 Shilling v Blackman Do.
 v Delany Do.
 Roatch v Shaner Do.
 Christy, Asse. v Irwin Do.
 v Jackson Do.
 Parker, Asse. v Davis Do.
 Whitsel v Rybolt Do.
 Sloan v Mitchel, Adm. Do
 Hamilton v Hawkins Do.
 Seaman v Miller & x Do.
 v same Do.
 Cook v Berwick Do
 v Hart Do
 v Johnson Do
 v Dobbins Do
 v Parkerson Do
 Vannater v Pelton Do.
 McKenzie v Semple Do
 Ryan v Park Do
 McDonald v Grimes Do
 Deal v Grove Do
 Fennel, Asse. v Marshall Do
 Colvin v Bailly Do
 (216) Wells v Johnson Discontd
 Redford v Hill Do
 v Criswell Do.
 Ryan v Shaner Do
 Brent v Teagarden. Judgt. for L 2
 Oury v Fisher }
 v Maurer } Judgt.
 v Miller }

- Todd v Shearer discontd
 Timmons v Gafney Do
 Wright v Dunlavy Do.
 Morgan v Saltsman Do.
 Dunlavy v Fry Do
 Swigart v Ross. Judgt. L 3. 15. 150 lb. Tobo & 20 S.
 Baggs v Cumings Discontd.
 Whitsel v Valentine Do.
 Marshal v Brooks Do.
 Spurgin v Patrick Do.
 Pigman No. 2 v Layton Do.
 Chriswell v Girty Do.
 v same } Do.
 v same }
 Asse. v same } Do.
 Asse. v Scott }
 Clinton v Cuninghame. Process not retnd.
 v Donne Jud. L 2. 1. 2. Tobo. 150. & 20 S.
 Wickwire v Douner Discontd.
 Wills v Zane Discontd.
 Hawkins v Bodkin Judgt.
 v Coffee Judgt.
 Virgin v Colvin discontd.
 Paul v West Do.
 Day v Christy Do
 Taylor v Byerly Do
 Humble v Clark Do
 v Burns Do
 Jones v McDowall Do
 Fowler v Brown Do
 Weddall, Asse. v Arle Do
 McClelland v Small } Do.
 v Same }
 (217) Davis, Asse. v Downer Judgt.
 v Warner Do. Process not served.
 Dix v Groggs discontd.
 Hardin, Jun. v Kincaid Do.
 Miller v Custard Do
 Ryan v Press Do

Fennel, Asse. v Mitchel Do
Maxwell v Ashcraft Do.
Cunningham v Bruce Do
Jolly v Barker Do
Moor No. 3 v Churchil Do.
Shaner, Asse. v Stephens Do
Jackson v Clark Do
Boley v Swigart Do.
v Russal Do
Green v Ward Do
Harrison v Armstrong Do.
Ross v Dunfield Do.
Dean v McMacmanomy Do.
Lestnett v Same Do
Roliter v Labatt Do
Steel v Merrick Do
Jackman v Clark Do
Hall v Redman Do
McCollister v Black Do
Savage v Teagarden Do
Fin v Williams Do
Adams v Horn Do
Lain v Peyton Do
Wallace v Meek Do
House v Mahon Do
Virgin v Moore Do
Adams v Shuster Do
Clendenin v Carmichael Do
Henthorn, Asse. v Martin Do
Semple v Owens Do
Hamilton v Hawkins Do
Ross v Fransway Do
Johnson v Wilson Do
(218) Morgan v Wooler Do
Steel v Thomas Do
McGlassen v Irwin Do
Pearse v Chery Do
Semple v Carol Do
Moore v Richmond Do

Dougherty v Black Do.

Tygart v Lindsay A. D. D.

v same }
v same } Do. D. D.

Stewart v Scott discontd.

Campbell v Gahagan Do.

Vallandigham v Springer }
v Clements }
v Meeks } Do
v Hartley }
v Lindsay }
v same }

Farree v Lynn Do

Maxwell v Thompson Do

Reed v Clarke Do

Dalton v Shaner Do.

Ross v Swift Do

v Black Do

Hawkins v Labat Do

Clarke, Asse. v Downer Do

Fin v Williams Do.

Kendal v Brownfield Do

Gary v McCulloch Do

McCullum v Edwards Do

Christy v Alexander Do

Spears v McDoran Do

Fitzgerald v Reiley Do

Cox v Boling Do

Halfpenny v Dennis Do

Wadel, Asse. v Brown Do

Asse. v Arnold Do

Shaner v Ross }
v Plumber } Do

Flander v Marshall Do

(219) Elliott v Small }
v Same } discontd.
v Sinnett }
v Winemiller }

Elliott v Dalton	
v Frederick	} Do.
v Armstrong	
v Rodgers	
v Same	
Wills v Gohagan	Do
Ewalt, Asse. v Armstrong & x	Do
Brownfield v Hustage	Do
McMichael v French	Do
Baker v Knight	Do
Tilton. Asse v Bell	Do
Brintson, Exors. v Elvy	} Do
v Bruce	
v Beeler	
v Sayers	
v Spencer	
v Moyer	
Isaac Hite v Vantrees	Judgt.
v Rich'd Postlethwait	Do
v Wilson	Do
v Carter	Do
Hardin the Younger v Myers	discontd.
Cook v Dobbins	Do
Parkeson v Burns	Do.
Russel v Gahagan	Do
Collins v Dobson	Do
Asse. v Clark	Do.
Lyons v Butler	Do.
Madison, Jun. v Sterling	Do.
McMahan v Pritchett	Do
Taylor v Hanks	Do.
Isaac Cox v McMahan	Do
Miller v Armstrong	Do
Thomas v Lambert	Do
Knight v Plumber	Do
King v Hansel	Do
McCashlin v Evans	Do
(220) Holmes v Huston	Do
McCollister v Corn	Judgt.

Decker v Wilson discontd.

Stephenson v Nicholas Do

Beeler v Burns Do

Spears v same Do

New Pet'o.

Baggs v Cumins Judgt.

Day v Wilson agd.

Lewis v Byers Judgt.

Lypolt v Masterson agreed

Vinamon v Davis agreed

Johnson v Sly abates

Devores, Exors. v Scott discontd

v Tigart Judgt.

Crawford v Hanks discontd.

v Miller Judgt. L. 3.

Marshall v Brooks Exor. Judgt.

Alias's

Still & Ux v Williams P. C.

Crow v Pearse N. G. leave & I'd.

Henderson v Douglas Impl.

Wilson & x Exors. v Lynch & x C. O.

Evans v Russell P C

Stocker v Acklin Impl.

Bay v Jackson agd.

Riddick v Ross C. O.

Boley v Maning. Spl. Bl. Jno. Fife.

v same Do

Brewer & Ux v Stacy C. O.

Cook v Beckett agd.

Spears v Beckett & x Exors. Impl.

Dye v Allen Tharp C. O.

Nichold v Corn Dismid N. Apl.

Johnson v Allen Tharp Agd.

Matthews v Ellis Agd.

Say v Dean Spl. Bl. Imparl.

(221) Ward v Clark C O

v McIlwane P C

Crow v Glin agreed

McCulloch v Taylor Spl. Bl. Impl.

Whitsel v Wise Dis'd. N. Apl.

Pluries Cap.

McCormick v Holles Judgt. for Plt. & Ex.

McGlaughlin v Woods Judgt. W. E. L 8. 1. 4.

Bentley v Vittitoe agd.

Workman v Saltsman P C

Ritchie v Thornbury dismd

Reno v Walker agd.

v same agd.

Norris v Embly P C

Ross v Maning P C

Minor, Asse v Blazier P C

McComish v Springer P C

Anderson v Evans C. O.

Steel v Hamilton C. O

McMahan v Hauck No Impt. discontd.

Kearns v Logan P C

Springer v Waller agd.

Smith v Gibson Discontd.

How v Genoway ux. P. C

Burns v Louterback C. O.

Whitsel v Crawford agreed

Beans v Johnson Judgt. for Plt Exn L 21. 10.

Harrison v Hall discontd.

Miller v Mitchel P C

v same Do

Barrackman v Harry C. O.

v Woods C. O.

Vallandigham v Walker P C

v Same C.O

Wills v Blackstone. dism'd. N. appl.

Lindsay v Smith }
v Hamilton } C O

Lintenbergher v Oldcraft. discontd.

(222) Labat v Smith discontd. N. Impl.

Pearse v Evans C.O

Laughlin v. Brown P C

McDonald v Slover agreed.

- Colwell v Thorn N. Imp. discontd.
 Kincaid v Henderson } Spl. Impl.
 v Same }
 Caldwell v Mills disd N. Apr.
 Cumins v Patterson N. In dismd.
 v Baggs disd. N. Apr.
 Caldwell v Wray } P C
 v Thorn }
 Gibson v Meek P C
 Gist v Alexander agd.
 McGlaughlin v Piggot N. In discontd.
 Hall v Lynch }
 v Fossett } dismd N. apce.
 v Shearer }
 v Hatfield }
 Heth v Stokes C. O
 Chambers v Wallace Agreed
 Gist v Cornwall C.O
 Forrester v Murphy C.O.
 Mitchel v Pelton Agd
 Miller v Same }
 v same } Discontd
 v Humble } P. C
 Appearances
 Ferguson v Heth dismt.
 Spears v Jones Richard Pauver Spl. Bl.
 Ward v Clark C. O.
 Postle v Greathouse. Als. Caps.
 Boley v Folke A'gd.
 v Orr S. B. & Impl.
 v Fossitt
 Stuart v Purdie Als Caps
 Miller v Parkeson Als Caps.
 v Gutridge Agd.
 v Same agd.
 Hugh Brodie v Samson Bever S. Impl.
 Crow v Watson agd.
 Dunn v Stuart Als. Caps.
 Johnson v McAdams Agd.

- Sills v Burns discontd.
 Louthback v Same dismt.
 Crow v Dye Spl. Bl. Impl.
 Russel v Jackson agd.
 Lypolt v Hall agd.
 Maning v Slover Als. Caps.
 Johnson v Evans Als. Caps.
 Steel v Sellars agd
 Decker v Jacobs rêtd.
 Parkison v Megee } agd.
 v same }
 Morrison, Sen. v Humble agd.
 McGee v Parkeson } agd.
 v same }
 Parkeson v Megee } agd.
 v same }
 Douglas v James agd.
 Moor v Richmond. discontd.
 Dye v Brent als. Caps.
 McMahan v Linsin agd.
 Parkison v McGee } agd.
 v same }
 Campbell v Blackman agd.
 Steel v Stephens als.
 Bever v Mayhal Co. Or.
 v Miller, Sen. &x. agd.
 Hopkins v Johnson dismd. no Inhabt.
 Blackman v Pearse agd.
 v Campbell agd.
 Wilson v Blackman agd.
 Blackman v Campbell agd.
 (224) Bonum v Sappinton Als. C.
 Boling v Wells A C
 Johnson v Lindsay C O
 Campbell v Tilton agd.
 v Scott agd.
 v Blackman N. I. discontd.
 Ross v Blank Discontd.
 Pearse v Hougland &x. agd.

Magee v Gambill als.

Bousman v Ormsby A. C.

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

v same

Als's. Caps.

(225)

Bousman v Ormsby

v same

v same

v same

v same	
v same	
v same	
v same	
v same	A C
v same	
v same	
v same	
v same	
v same	
v same	
v same	
Chambers v Ewalt	A C
Chambers (Inft) v Same	A C
Kuykendall v Colvin	Impl.
v Decker	A C
Clark v Clark	A C
v Clark	A C
v Quin	A C
Wright v Bever	Impl
Cook v John McCashlin	C. O.
Bousman v Ormsby	Spl. Impl.
Conner v Slover	agd.
Boley v Mitchel	C. O.
Zachy Connell v. Poe &x	A C
Cresop's Exors. v Campbell	C. O
Biddle v Good &x	A C
Cresop v Plumber	discontd.
Logan v Miller	A C
Devore v Johnson	agd.
Johnson &x v Cotes	C O
Evans v Richards	Als.
Mathew v McLain	A C
Stockwell v A B	agd.
(226) Thompson v Hopkins.	Spl. Bl. Impl.
Kincaid v Henderson	Impl.
Means v Graham	Dismt. no appr.
Beeler v Scott	Spl. Bl.
Bruce v Hougland	agd.

Wills v Quick spl. Bl. Impl.

Nicholds v Day discontd.

Shaaf v Douner A C

Pentecost v Jones C. O

Fosset v Hall C. O

Lynch v Same C. O

Crow v Watson Agd.

Johnson v McAdam agd.

Sills v Burns S. Impl.

Crow v Dye Spl. Bl.

Dunn v Stuart Discontd.

Spivy v Records Impl.

Marshall v Huff Agd.

Recog'ce.

C. W. v Mounce discontd

v Springer discontd

v Steel disch'd.

v Black. Contd.

v Bradley contd

v the same Contd.

v Beall Discontd

v Winemiller. Ordered that his recogn. be prosecuted for want of appearance.

(227) Commonwealth v James Chambers, failing to appear, ordered to be prosecuted.

v David Duncan. Do.

v Moses Davidson Do.

v David Irwin Do.

v Susannah Schley Do

v Brawdy. Discontd.

v Dean Contd.

v John Carr. No. Appl. Ord. R. P.

v Hall Do.

v Ross Do

v. Smith & others Discontd.

v. Michl. Tygert. No appl. O. P. R.

Court met accord'g to adjrnt, Sept. 30, 1779.

Present, Thomas Freeman, Oliver Miller, Joshua Wright,
Judge Beckett, Isaac Cox, Gent. Just.

Grand Jury Presentment.

- v Johnston Campbell Discontd.
- v John McDonald fined accd'g to Law
- v Richd. McMahan Do No Guilty
- v Christie agd.
- v Henry Bowling fined according to Law.
- v Roberts fined Do.
- v McAdams fined accdg. to Law.
- v Oharra fined accdg to Law.
- v Johnston &x Discontd.
- v Newkirk and others. Discontd.
- v Labatt fine.
- v McClellen N. Guilty
- v Robertson fine
- v Daviss Do
- v Persons N. Guilty.
- v McKendley fine.
- v Irwin N. Guilty
- v Duncan fine
- v Flemming fined
- v Bealle Do
- v Lentenburger N. Guilty.
- v Roberts fined
- (228) Commonwealth v Devoir Abtes. D. Dead.
- v Dodds fined
- v Judy Do
- v Henderson Do
- v McKendley Do.
- v Irwin Do.
- v Castleman Discontd.
- v Corn fined.
- { Informations agt Gray. Discontd. He
- { adhering to the state of Penn'a.

Indictments.

Lyda v Cox. Then came a Jury towit. James Wright, Gabl. Cox Benjamin Forster, Thos. Applegate Samson Bever Abraham Miller Ezekiel Bernard Andrew Pearse, W^m. Hawkins Hezekiah Applegate Robert McKie, John Alexander. Verdt. & Judgt. for Plt. L. 100.

Hopkins v Johnson. Attⁿ.

Judgt for L 80 & Ord. Sale and that the Sheriff pay to Abigail Johnson out of the money arising from the sale the sum of L 480 and the Bal^{ce} if any to be applied towards satisfaction of this Judgment.

Johnson v Johnson. Atta. Judgment & Order of Sale, except Six bushells of wheat and all the Keggs in the Shffs. return and the Bed Tick & one Ax & 1 pr. Geers being the property of Abighil Johnson, and the balance if any to be paid the plaintiff. Joshua Wright being sworn Garnishee sayeth he hath 130 l. flour in his Hands the property of the Defendt.

(229) James Boyce & x v James Grimes & x. N. G. & Joined. Then came a Jury, towit: James Wright, Abraham Miller Gabriel Cox, Ezekiel Barnett John Alexander, John Quick Uriah Johnston William Hawkins Thomas Applegate Hezekiah Applegate Samson Beavers Robert Macky Verdt. & Jugmt. for Plaintiff, L. 20.

James Boyce v James Grimes. Case.

Then came a Jury towit, James Wright, Gabriel Cox, John Alexander, Uriah Johnston, Thomas Applegate, Samson Beavers, Abraham Miller, Ezekiel Barnitt, John Quick, John Gabridge Hezekiah Applegate & Robert McKey. Verdt. Defd.

Ordered that Margaret the wife of Jeremiah McCarty a poor Soldier in the Continental Service from this State be allowed four pounds pr. month for the support of herself and three children, To Commence the first day of Apl. Last & Ending the first day of Apl. Next.

Anderson & Todd v Saml. Newell. W. Rep. Dismissed and a Writ of Restertution (on Returno Habondo) awarded.

Ordered that — Matthews the wife of — Matthews a poor Soldier in the Continental Service be allowed three pounds per month to commence from the first day of January last and to continue for nine months.

Thos. Freeman Gent. Abst.

(230) Ordered that George Wrey an Orphan of Sixteen years of age the first day of November next be bound to John Robertson according to Law the sd. John to give him a horse & Saddle at the expiration of his time.

Lewis Nicholas v David Day. Dismis'd for w't. of appearance.

Ordered that Benjamin Kuykendall Gent. be Impowered to Borrow five hundred pounds upon Interest, to be applied Towards Discharging the County Debt, and that the Court at the Laying the Next County Levy provide for the payment Thereof.

Ordered that Court be adjourned untill Tomorrow Morning 9 oClock.

ISAAC COX.

Court met according to adjournment Oct. 1st, 1779.

Present Isaac Cox Joshua Wright Samuel Newell Joseph Beckett Oliver Miller Gent. Justices.

C. Wealth v Andrew Pearse. Then came a jury towit, Joseph Skelton James Wright Gabl. Cox Wm. Murley Isaack Custard Thos. Applegate John Wall Moses Holaday Saml. Lemin Elijah Rittenhouse Richd. McMahan Uriah Johnson. Verdt. for Defendant.

(231) Absent Saml. Newel Gent.

Wright v Kenneday. Atta. Judgt. L 41, and Ordered that 40 L be condemned in the hands of Edwd. Gather.

C. W. v Mary Boyce Sen. & Mary Boyce Junr. discontinued. Costs paid.

Golahar & ux v Bradly, Sen. Ordered that an Atta. do Issue.

Tacitus Gilyard v Isaac Ellis. Ordered to be redock'd.

Com Wealth v Douging. The Defendt. failing to appear Ordered that his Recogze be prosecuted.

Sciri Facias.

Martha Lapsly v John Reed contd.

Wm. Brashears v Thos. Hamilton Judgt.

Bazil Brown v The Same Judgt.

Com Wealth v James Smith &u. discontd.

Chancery.

Thomas Cresop v Willm. Shearer. contd.

Joseph Simon &u. v Alexander McKee contd.

Benjamin Wells v Thomas Rearden contd.

Ordered that the Sheriff do Summon a Grand Jury 24 good & Lawfull men, to attend at Nov. Court.

(232) Present Oliver Miller Gent.

Ordered that Richd. Noble be recommend to serve as an Ensign in Capt. Freeman Co. of militia in the room of Wm. Colvin who was broke by Verdt. of Ct. Martial.

Joshua Wright Sworn Capt. in the Militia. Com. read.

Ordered that Rebecca Davis Orpan & Infant of Lem'l. Davis be bound to Isaac Cox according to Law She being three years old the 16th Day of Augt. last.

Ordered that Court be adjourned till Court in Course.

ISAAC COX.

At a Court Continued and held for Yohogania County October 25th, 1779.

Present Edward Ward, Joshua Wright Benjamin Kuykendal Thomas Smallman Oliver Miller, Gent. Justices.

Colo. Isaac Cox having applied to us for a pasport to remove himself, family and attendance from this County to the County of Kentucky on the Ohio, It ordered that the sd. Isaac Cox have leave to remove himself and attendance as aforesd, he Deporting himself as a good Citizen and in amenity with the United States, having been long a Magistrate in this County, and Demeaned himself well therein. It is Expected that all good offices be done him by the Inhabitants of this Com. Wealth.

George Roots & Dolphin Drew, Sworn Atty's.

(233) Adm. of the Estate of Jacob Stelty dec'd, is granted to Anne his wife she having Complied with the Law. Wm. Frye, Zadock Wright, John Jones & John Trumbo or any three of them app's. sd. Estate.

Deed Poll James Bruce to George Bruce. Ackd. O. R.

Daniel Leet Sworn Deputy Surveyor having Produced a Commission for that Purpose.

Power of Att. Morris Brody to Gabriel Cox Ackd. O. R.

Ordered that Court be adjourned untill Tomorrow morning 9 o'Clock.

EDWD. WARD.

October the 26th, 1779, Court met according to Adjournment.

Present Edward Ward Thomas Smallman Isaac Cox Joshua Wright Samuel Newell, Gent. Justices.

Power of Atto. Daniel Swolevan to Geo. Roots. Ackd. O. R.

Thos. Reed v Evert Springer Impal. Granted, Money Deposited with the Court.

Benjamin Kuykendall Gent. Present.

- (234) John Embly v John Crow. Then came a Jury Towit. Gabriel Cox John Kinkaid, John Duglass, James Wright, Henry Hogland, John Bowley, John Springer, Hugh Brawdy, Zadock Wright, Joseph Perkerson, Richd. Crooks, Isaac Newkirk. Verdict for Defdt. & Ju.

Fife v Tygert. N. G. with leave & Issued. Then came the same Jury towit, Gabriel Cox, John Kinkaid, John Embly James Wright, Henry Hoagland, John Bowley, John Springer, Hugh Brawdy, Zadock Wright, Joseph Perkerson, Richd. Crooks & Isaac Newkirk. Verdict for Plaintiff & Jud. L 50.

Edward Ward Gent. came into Court and being Sworn on the Holy Evangelist of Almighty God Sayeth, That Thomas Smallman, Gent. was a Lieutenant and Quarter Master in the first Batalion in the Pennsylvania Redgment in Actual Service in the year 1758.

Oliver Miller Gent. Present.

Philip Gilliland v William Lynn. then came a Jury, towit, John Kinkaid, John Embly, James Wright, Henry Hogland, John Bowley, Wm. Crow, Hugh Brawdy, Zadock Wright, Joseph Perkerson, Richard Crooks, Isaac Newkirk, Jno. Crow. Verdt. for Plaintiff & Judmt. L 1000.

- (235) Ordered that Jno. Springer be Sommoned to appear at the Next Court to shew Cause if any why he refused to Serve as a Jury man.

Van Swearengen v William Burris, David Williams S. B. & Impl.

Benjaman Kuykendall Gent. come into Court and being Sworn Sayeth, that in the Spring of the year 1754 he saw Maj. Edward Ward on his march to Virginia from what is now Fort Pitt, that the sd. Maj. Ward had the command of the party with him & that he understood that he was the commanding officer

of the Post at the aforesd. place as an officer in the Virginia line & Surrendered to the French.

Todd v Gibson. Saml. Newell S. B. & Imp.

Ordered that Court be adjourned untill Tomorrow morning 9 oClock.

EDWD. WARD.

October 27th, 1779 Court met according to adjournment.

Present William Crawford. Thomas Smallman, Isaac Cox Benjamin Kuykendall and Oliver Miller, Gent. Justices.

Certificate Adam Stephens to Isaac Cox On motion ordered to be record.

Colo. Crawford being Sworn Sayeth that The sd. Isaac Cox was a Subaltron Officer in the Virginia Service in the year 1764.

(236) Spears v Winemiller. then came a Jury, Towit. John Kinkaid, John Embley, James Wright, Henry Hogland, John Bowley, Hugh Brawdy, Zadock Wright, Joseph Perkerson, Richd. Crooks, Isaac Newkirk, John Crow & William Crow. Verdi't. for Plaintiff & Judmt for L 19. 17. 4.

Crow v Williams. Then came a Jury, towit, Enoch Springer, John Springer, Andrew Robertson, Thomas Spencer, Saml. Devoir, Saml. St. Clair, Samson Beavers, Saml. Hinch, Saml. Brice, Robert Johnston, Elisha Ritinghouse & Moses Holliday. Verdi't for plaintiff & Jdm. L 300.

Joshua Wright Gent. Prest.

Spears v Gist. Then came a Jury towit. John Kinkaid, John Embly, James Wright, Uriah Johnston, John Bowley, Hugh Brawdy, Zadock Wright, Joseph Perkerson, Richd. Crooks, Isaac Newkirk, Thomas Bond, William Crow. Vedt. for plaintiff & Judm L 11. 16.

Crow v Dye Non asstn. & J'd.

Brawdy v Beavers. N. G. leave & Jo'nd

Wright v the same. N. Asst & Jo'nd

Ordered that the wife of John Overlin a poor soldier be allowed fifteen pounds pr. month for the support of herself and five Children commencing the first day of July Last and ending the first of January Next.

Ordered the wife of David Smith a poor soldier, be allowed twelve pounds pr. month for the support of herself and four Children, Commencing & ending as afores'd.

Ordered that the wife of Thomas Dunn be allowed twelve pounds pr. month for the support of herself and four children Commencing the first of July Last & ending the first of January next.

Ordered that the States attorney Prefer a Bill of Indictmt. agt. David Williams for ass't on the Body of Elizabeth Crow.

Ordered that Ezuby Munn be allo'd. two Days attendance in the suit of Crow v Williams.

Ordered that Jacob Bouseman be allo'd. half a Dollar for a man & the same for a Horse for ferrying a Cross Monongahela.

(237) Berry v Crawford. Non Asst & Jo'nd.

Meers v Hooper Dis. Contd.

Same v Same. Do.

Hooper v Myers. Do.

Kinkaid v Henderson. N. G. leave & Jo'nd.

Same v Same Do.

Johnston v Springer Judmt W. Ey.

Bouseman v Ormsby. In Tresp. Dismd.

Ordered that John Lad serve his master Wm. Crawford, Eighteen month after the Expiration of his Time by Ind'tr. for Loss of Time in runing away and Expence in Taking him up.

James Hoge is app. Ensign & Joseph Kirkpatrick Liut. of Militia.

Ordered that Court be adjourned untill Court in Course.

THO. SMALLMAN.

(238)

At a Court Continued and held for Yohogania County, December 27th, 1779.

Present Edward Ward, Benjamin Kuykendal, Joshua Wright, Benjamin Frye & Joseph Beckett Gent. Present.

Deed of Surrender Pentecost to [——— ?] Ackd. O. R.

Indenture Elenor Frazer to James M^cMahen. Ackd. O. R.

Oliver Miller Gent. Present.

On motion of Michael Vonbuskkirk praying a Certificate of his Military Services, It appears to this Court (from Testimony) that the said Vonbuskkirk Served as an Insign under a Commission now produced in Court, from his Excellency Horatio Sharpe Governor of Maryland, dated the 2nd. of May, 1756, in a corps raised by Alexander Bealle for the Service of Mary-

land, and that the sd Vonbuskkirk hath for many years past and now is an Inhabitant of this State. Ord. to be Certif'd.

Ordered that James Wall, Walter Wall Richd. Sparks & Andrew Pearce Ju. do Review a road the nearest and best from the New Store on the Monaungohela River into the road near Andrew Dye's, and make return of the Conveniency and Inconveniences to next Ct.

Riddeck v Springer. John Springer Sp. bl.

Majr. Edward Ward having applied to this Court to Certifie his Gen'l. Character, It is ordered therefore to be Certified. That the sd. Maj. Edward Ward hath been a Justice of the Peace in this County since its Institution, and Demeaned himself wel therein, as also in the Office of Sheriff for sd. County, and that he has always deported himself as a Good Citizen of the Com. Wealth, & as an honest Man and a good Neighbour.

Ordered that Walter Wall and Joseph Warner¹ be app'd. Cons'b. and be sworn before the Next Majistrate to Qualify.

Ordered that Court be adjourned untill Tomorrow Morning 9 oClock.

EDWD. WARD.

(239) Court met according to adjournment Decemb. 28th, 1779.

Present Edward Ward, Benjamin Kuykendal Joshua Wright Oliver Miller, Gent. Justices.

License is granted to Cabriel Cox to keep an Ordinary at his House the Ensuing, he complying with the Law.

Dr. The County of Yohogania,

To the States attorney,	L 500.
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To the Sheriff for Ex[?]. Services,	1200 To.
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To three called Courts,	600
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To the Clerk for Ex[?] Services,	1200. Do
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To three Called Courts,	600. Do.
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Ordered that the Sheriff collect forty Eight Shillings from each Tithable as a County Levy for the present year.

Ordered that Samuel Irwin Gent. be appointed attorney for the Com. Wealth in this County the ensuing year, in the room of Phil. Pendleton Gent. who has resigned.

Inventory of the Estate of James Devoir Deceas'd retd. Order to be recorded.

¹ Intended probably for Joseph Warne.

Ordered that Elizabeth Keyher, widow of Frederick Keyher a soldier from this State who died in the Service be allowed fifteen pounds pr. month for the support of herself and four children, commencing the 26th of Octob. and ending 26 Apr. next.

Ordered that Ruth Davis widow of James Daviss a soldier who died in the Service be allowed Twelve pounds pr. month for the support of herself and three children, commencing the 26th of Octob'r. Last and ending the 26 day Apl. next.

Ordered that Geo. McCormick and William Harrison Gent. the present and late Sheriffs, do bring in their accounts for settlement at the next Ct.

(240) Division and allotment of the one third of the Landed Estate of James Devoir, Deceased to his widow or Relict, returned and O. R.

At a Called Court held for the Trial of David Donee who stands charged with passing one eigh and one five Dollars. continental Counterfit Bills of Credit.

Prest. Edwd. Ward, Benj. Kuykendal, Joshua Wright, John Cannon, Saml. Newel, Joseph Becket, Benj. Frye & Oliver Miller.

The prisoner being set to the Bar, and being asked guilty or not Guilty pleads not guilty. the Court upon hearing the witnesses are of opinion that the prisoner is not Guilty of Forgery or counterfeiting but that he is Guilty of a high Misdemeanor, and fraudulent Imposition. Ordered that the said David Donee be bound over to the next Grand Jury Court and that the States Attorney prefer a Bill of Indictment. Whereupon the said David Donee with Hugh Brawdy and Stephen Hall his Security come into Court and entered into recogn. as aforesd. The sd Donee held in L 500 the sd sureties in L 250 Each.

Daniel Caugha & John Cannon come into Court and entered into recognizance for the appearance of the sd. Caugha, appearance at the next Grand Jury Court, and give testimony agt. David Donee, held in L 250 each.

Berry v Crawford Contd.

James Spear being bound in recognizance appeared. Ordered to be bound to the next G. Jury. James Spears with Andrew pearce Ju. his secr. held L 500 each.

John Brackenridge bound in recgn. appd. Ordered to be bound to Next G. Jury Ct. John Brackenridge with James Brackenridge his Sec. come into Cot. held in L 500 Each.

(241) Whereas John Campbell Esqr. Lieut. for this County, is now a Prisoner with the Indians, and it is uncertain when he may return to Take the Command of the Militia of this County, upon considering the same and the present situation of the Melitia of this County, it is the opinion of this Co't. that it is Necessary that some person should be appointed in the stead of the said Colo. Campbell, & it is therefore ordered that Dorsey Pentecost be recommended to his Excell. the Governor as a proper person to be appointed in the stead of the sd. Colo. Campbell.¹

Ordered that Joseph Beeler be recommend as Colo. of the First Batalion of Militia in the stead of John Stephenson who hath resigned, the sd. Joseph being Colo. of the sd. Battalion.

William Harrison is recommd. to the Governor as a proper person to serve as Lieut. Colo. of sd. Battalion in the sd. of the sd. Joseph Beeler, the sd. William being Majr. of sd. Batta.

George Vallandingham is recomd. as Colo. of the 2nd. Battalion in the stead of Isaac Cox who hath res'd. the said George being Lut. Colo. of sd. Battalion.

Gabriel Cox is appointed Lieut. Colo. of the 2nd. Battalion he being Maj. Thereof.

Ordered that Colo. Joseph Beeler furnish the next Court with a List, Seniority and rank of the Caps. of the Militia of the first Battalion This County in order to Enable the Court to proceed to the choice of majors of the Melitia. and Colo. Vallandingham of the second Battalions.

Ordered that Benjamin Kuykendal be appointed to contract with some person to bring up two Hundred Bushels of Salt which now lies at Alexandria in the house of Joseph Watson, belonging to the County, and that John Cannon assign an Order relating thereto that he has in his hands to the sd. Benjamin Kirkendall.

¹ This was the John Campbell, one of the gentlemen justices of the court.

Ordered that Court be adjourned Til Court in Course.

JOHN CANON.

- (242) At a Called Court held the 18th day of January 1780 for the Examination of David Lindsey and Thomas Pearcesal who stands charged with Perjury.

Preſent Edward Ward William Goe Benjamin Frye Joseph Beckett John Cannon, Joshua Wright Gent. Justices.

The Prisoners being set to the Bar pleads not Guilty, but they refusing to go through the Examination before the Examining Court, offered to Enter into Recognizance to appear before the next Genl. Court, Ordered that they Enter into recognizance accordingly. Whereupon the said David Lindsey with Henry Kersey & Tobias Mattocks his Securitys enter into recognize as aforesd, the sd. David held in L 1000 and his Secur'y. in L 500 Each. and the said Henry Kearsey enters securities for the personal appearance of the said Thomas as aforesaid held in L 1000. John Springer with Isaac Springer his Surety enter into recognizance for the Personal appearance of the sd. John at the next Gen. Ct. to Testify agt. the sd. David & Thomas.

John Springer Surety for Enoch Springer as afsd. held as aforesaid.

Joseph Ross with John Springer his Security held as afsd.

EDWD. WARD.

- (243) At a Court held for Yohogania County January 24th 1780.

Present Edward Ward John Cannon Benj. Kuykendall, Joshua Wright Gent. Justices.

Ward v Broadhead. C. O.

Administn. of the Estate of Potter Smith dec. is granted to William Brown he having complied with the Law.

John Munn, John Hopkins, John Collings & Livingston Thomas appointed Appraisers to sd. Estate.

Ordered that Isaac Justin, John Chamberlain William Bruce & W^m. Mayhall be allowed 175 lb of Tob'o. for 7 days attendance as a Guard on a prisoner, 84 dollars Each for finding their own provisions, and that the Sheriff pay the same.

Ordered that Joseph Perkerson be sommoned to Next Court

to Shew Cause why he detains James Drenning as a Servant who alleges he is a free person.

George Heart v Jacob Trowbough, the plaintiff failing to appear the Defd. prays not suit for want of security for Costs, which is accordingly granted.

Ordered that Court be adjourned until Court in Course.

EDWD. WARD.

(244) At a Court held for Yohogania County February the 28th, 1780.

(Present) John Cannon Benjamin Kuykendall Joshua Wright Samuel Newell Gentl. Justices.

Samuel McKay heir of AEneas McKay deceased proved to the satisfaction of this Court that his said Father was a Depy. Commissary under Genl. Commissary Leake in the Service of the King of Great Britain in the years 1771 and 1772, and that the said McKey has been a resider in this State, and has never recv'd. any warrants for Lands under the sd. King's Proclamation of 1763, and Ord. to be Certified.

At the request of Ann Hammon Ordered that her son Isaac Hammon be bound to Isaac McMichael until he arrive at the age of 21 years being now 5 years of age, and that the sd. McMichl. teach him to read wright & cipher as far as the rule of three, also trade and Mystery of Husbandry and give him one new suit of Cloth, a Bible, Grubing how and ax, at the expiration of sd Term.

Samuel Semple proved to the satisfaction of the Court that he served as a Captain in a Corps of rangers in the Pennsy'a. Service in the Last, and is Intitled under the Kings Proclamation of 1763.

Walker v McMahan. Order for Dedemus to Take Depositions.

John Ormsby proved to the satisfaction of the Court that he served as Commissary in the Service of the Crown of Great Britain in the years 1758 & 1759 & 60, and that he has never obtained any warrant for lands under the sd. Kings Proclamation of 1763.

Philip Pendleton Asse. of John Ormsby prov'd. as afsd. that the said John Ormsby serv'd. as Paymaster in the service afsd.

On the application of Catherine Doblin who is afflicted with convulsive fits which render her Incapable of Procuring her Subsistence, Ordered that Richd. McMahan agree with some person to provide her with Necessary Subsistence untill the Next Court.

Andrew Heath Sworn Deputy Clerk.

- (245) George McCarmick proved to the satisfaction of the Court that he served as an Ensign in a Company of rangers in the Virg'a. Service in 1764 and that he has never rec'd any premiums for sd. Service under the Procl. of 1763.

Thomas Smallman Gent. one of the Justices of the peace for this County, Proved to the satisfaction of the Court, that he was an Ensign Penna. redgmt in the year 1756, and that he never receiv'd. any warrant or other Bennifeet under the Kings Proclamation of 1763.

Same as Lieut. in the first Penna. Redgmt. in 1756.

Same as Lieut. of Cavalry in the year 1757.

George Roots & Charls Wier Thruston, asse of sd. Smallman, pro'd. as Capt. in the first Pen'a. Redgmt. in the year 1760.

Same as Asse. of the same. Indian Agent at fort Charters in the year 1761.

Wm. McCarmick as Lieut. in a Virginia ranging Compy. in the year 1764.

Judy v Boyce. James Grayham Sl. B. & Impl.

Vannatree v Grimes. W^m. Boyce. Spl. B. & Impl.

Wm. Tully and Charles Records, his Sec'y, being bound in Recgn. and failing to appear Ordered to be prosecuted.

Thomas Smallman, John Cannon, George Vallandingham Gent. are recommended to the govern. to appoint one as Sheriff the Ensuing year.

Bargain & Sale. Dorsey Pentecost to John Homblér. ackd. & O. R.

Ordered that ferry keeps on the Monongahela River be allowed three dollars for ferrying a man & Horse.

Moore v Reddeck. Disctd. plaintiff.

Joseph Perkerson being Summoned to shew cause why he detains James Denning as a Servant appeared and after hearing the allegations of the parties the Court are of Opinion that the

sd Drenning is a free person and is hereby Discharged from any farther Service.

- (246) Alexander Fowler proved to the satisfaction of the Court that he serv'd. as Lieut. in the 74th Redgmt. in the British Service in America in the Last War, and contd. therein to the end of sd. War, and that he never Recd. any Benefiet under the Kings procl. of 1763.

Alexd. Fowler assee. of Leut. George Brock proved as aforesd.

Alexd. Fowler Asse. of Leut. Anguish McNeill, p'd. as afsd.

Alexd. Fowler Assine of Leut. Henry Dolway. Prov'd. as afsd.

Alexd. Fowler, Asse. of Leut. Butler Stubbs. Prov'd. as afsd.

John Gibson Gent. one of the Justices of the peace for this County prov'd. to the Satisfaction of the Court that he s'd. as a Deputy Commissr. in the Service of Great Brittain at Fort Pitt in the year 1760, and that he has Never rec'd. any Benefiet under the kings procl. of 1763.

Bargain and Sale James Swolevan to Robert Campbell. ackd. O. R.

James Colvin prov'd to the satisfaction of the Court that he serv'd. as Ensign in a Company of Volunteers in the Virga. Service in the year 1764, and that he never recd. any Benefiet under the kings procl. of 1763.

Oliver Miller Gent. being bound in recognizance appeared in Court, and after hearing the Evidences are of Oppinion that the sd. Miller be discharge from his recogn.

Ordered that Court be adjourned untill Court in Course.

BENJA. KUYKENDALL.

At a Court held for Yohogania County March the 27th, 1780.

Present, Wm. Crawford, Joseph Beeler Edwd. Ward, Jos. Wright, Thos. Smallman Geo. Valandigham, Gentlemen Justices.

- (247) On Motion Admn. is granted to Catherine Hull up. the Estate of Francis Hull dec'd.

Ordered that James Enis, James Shane, W^m. Ward & W^m Jenkins or any three of them being first sworn do appraise the same.

Ordered that she enter into Bond & security for the due administration thereof in a bond for thirty thousand pounds, which was entered into accordingly.

Present Richd. Yeates.

On the motion of Tobias Woods ordered that the Admrn. Bond of John Stephenson Admr. of Jeremiah Woods be put in Suit.

On Motion Admrn. is granted Lewis Williams of the Estate of Wm. Wms. dec'd. & that he enter into bond with Security for the sum of ten thousand pounds, & that W^m. Dunn, Joseph Clem Thos. Mercer & Andw. Baker or any three first sworn do appraise the same.

Ordered that Jno. Cannon & Richd. Yeates Gentlemen do examine & settle the administrators acct. of the estate of Peter Smith decd.

W^m. Parkerson v Benj. Tomlinson. Thos. Edgington Spl. Bail.

Ordered that Joseph Cox be bound in the sum of ten thousand pounds with two securities to appear at the next Grand Jury Court to answer for stab'g. Jno. Elliott, himself in the sum of ten thousand pounds & the securities in the sum of five thousand each & that he Cox be of good behaviour in the meantime.

Ordered that Jno. Elliott be recognized to appear at the next Grand Jury Ct. to give evidence v Joseph Cox, in the sum of five thousand pounds w'ch is done accordingly &c.

Joseph Cox entered into Recognizance in the sum of ten thousand pounds & Jas. Innis & Hugh Scott his securities in (248) the sum of five thousand pounds each, that the sd. Cox appear at the next Grand Jury Court to answer the Complain for stabbing Jno. Elliott, & that he be of good behavior in the meantime.

Ordered that it be certified that Edwd. Ward Gentleman Acted as a Captn. in the 1st Pensylv. Battalian in the years 57 & 58, & as a Lieuten. 56 & 57 & as an indian agent in Service of the Crown in the years 60. 61. 62 & that he has had no satisfaction for the same from the K. of G. B. proclamation of 63.

Same that Andw. Vaughan served in the Virga Rejiments in the year 55 as a sirgeant & as above.

Same Andw. Rote served at the same time as a private &c.

Ordered that Thos. Miller be appointed a Constable in the room of W^m. Benwich for 1780.

Ordered that the Court adjourn untill tomorrow morning 10 oClock.

W. CRAWFORD.

At a Court Continued & held for the County of Yohogania March 28th, 1780.

Present Edwd. Ward William Goe Thos. Smallman Richd. Yeates, Gentlemen Justices.

(249) Ordered that Andrew Heth do agree by Auction to the lowest bidder with some person to repair the Court house and Jail likewise to erect a Pillory & Stocks as soon as possibly may be.

Bazil Brown v Robt. Hamilton, Thos. Hamilton Spl. bail & impl.

Ordered that Saml Wells be summoned to appear before the next Court to answer the Petition of Ann Wells his wife & that attachment Issue that he give security to appear & abide the order of Court & that he be of the peace toward the sd Ann and all other good subjects of this Commonwealth.

Upon the Complaint of James ODonald that Andrew Dun serjt. and John Shey soldier did grossly beat abuse & otherwise ill treat him the sd ODonald. Ordered that Col'o. Broadhead be requested to have the sd Soldiers delivered to the Civill Authority to be dealt with according to Law.

License granted to John Collins to keep a Tavern he complying with the law.

Ordered that Capt. Thomas Freeman be recommended to the Governour as a Majr. in the first Yohogania Battalion in the Room of Majr. W^m. Harrison promoted.

Ordered that Captn. Matthew Richie be recommended to the Governour to serve as Majr in the 2^d battalion of Yohogania County in the Room of Majr Gabl. Cox promoted.

Ordered that Hezekiah M^cGruder be rec'd. as Captn in the 1st Batt'an. in the room of Captn. Freeman promoted.

(250) Ordered that George Redman be recommended as a Captn in the 2d Battalian in the room of Captn Philip Ross resigned.

Bazil Brown v Thos. Hamilton, Joseph Parkison Spl. Bail & imp.

Ordered that John Johnson be Recommended Capt. in the room of Ct. John Crow.

Ordered that Andrew Dye be recommended first Lut. in the room of Elija Hart.

Ordered that Uriah Johnson be recommended 2d Lieut in the room of Wm. Crow.

Ordered that Samuel Devore be recommended as Ensgn in the room of John Johnson prom'td.

Jas. McClellin v Thos. Cummins, Gabriel Cox Spl. Bail & imp Bawline v Norris. dismd.

On the Motion of James Richason that the Shf had attachd sundry goods in the hand of Garnishees upon the Supposition they were W^m. Lynn's, Ordered that the sd Goods be released.

Ordered that Jacob Bousman be allowed six dollars ferriage for a man and horse, three for each.

Ordered that all the Ferry keepers of this County, Jacob Bousman excepted, do receive four dollars ferriage for one man and one horse & no more.

Ordered that Peter Ellrod be allowed Sixty doll^{rs}. pr. week for two months for boarding & Lodg Catherin Devilin.

(251) W^m. Christy proved his title to Military Service as ensign in the first Pensylv. Regiment. &c &c. 1760.

W^m. Evans proved his title to military service as Artificer by warrant from the year 58 to 63 &c.

Hawkins v Clerk discontd.

Colwell v Lynn same.

Ordered that Nathaniel Brown be allowed Eighty pounds for maintaining Christopher Deklin four months past.

Brawdy v Beaver peremtory rule to try at next Court.

Jno. McClure proved his title to Military Service as an Ensign in the first Pennsylv. Regiment in the year 1760 & never has sold the same &c.

Whiteside v Girty. Then came a Jury towit, Gabl Cox Jno Johnson Jos. Wright, Jno Wall, Saml Devoir Stephen Hall, Elija Rittenhouse W^m. Crow, Andw. Dye, Henry Newkirk, James Spears, Andw. Pearce. Verdict for plf. 170 Damages & Judgmt.

Dedimus to take the deposition of Thos. Talbott to perpetuate his Testimony respecting a piece of Land on which Matthew Ritchie now lives.

Johnson v Springer W. I.

Day v Stanberry. Then came a Jury towit Zadock Wright, Jas. Brice, Robt. Johnson, Thos. Applegate, Tobias Mattocks, Tobias Deckart, Jas. Ferguson, W^m. Redick, Sampson Beavers, John Munn Antony Dunlavy Thos. Hambleton, find for the Plt. L 50 dam. & Judgmt.

(252) James Stevenson proved his Service as a Lieuten. in a ranging Compy &c. 74.

Wm. Harrison proved he Servd. as a Lieutnt. in the year 74 in a ranging Company &c.

Jno. Stephenson served as a Captn. in a Ranging Company in 74.

John Hinkston served as a Lieutn. in a Ranging Company in 74 &c.

Marcus Stevenson served as an Ensign in a Ranging Company in 74 &c.

William Crawford proved he served as a Lieut. of Light Horse in 1758 &c.

William Crawford proved his Services as a Majr of Rangers 1774 &c.

Administration granted to W^m. Park of the estate of James Park decd. he giving Security according to Law.

Joseph Vance Henry Graham, Thos. Stoms William Vanusan appointed to appraise the same being first sworn.

Ordered that Geog. Scott Orphant be bound to David Gaut to learn the art of Tanning trade &c.

Ordered that John Scott Orphant be Bound to John Cannon Gent.

George Valandigham Proved to the satisfaction of the Court that he Served as Lieut. under L. Dunmore 1774.

John Robinson as Capt. same.

(253) Thos. Warrin proved that he served as Insign under Capt. Cresop, in the year 1774.

John Lemon v Tobias Mattocks. John McComis Sp. Bl. & Impl.

Joseph Becket proved that he served as Lieut. in the year 1772 under Lord Dunmore.

John James Wood, same.

Ordered that John Wright be returned as Constable in David Andrews District in the room of Tobias Mattocks.

Ordered that Gersham Hull be appointed Constable in Capt. Thos. Bays district.

Zadock Wright proved to the satisfaction of the Court that he served as Lieut. under Ld. Dunmore 74.

The same as Serjt. in a Rangin Company in 64.

George Berry the sam. under Ld. Dunmore in 74.

Tater Elrod vs Elijah Hart. Atta. Isued.

Fantlyroy Seal vs Aquilla Whittaker. Atta. Isued.

Ordered that Isaac Israelos be appointed Overseer of half the road Leading from Pentecost's Mill to Cattfish Camp, in the room of Jno. McDonel.

Ordered that Richd. Johnson be appointed Overseer of the road from Devoirs Ferry to where the road Lead'g to the new Store strikes out of Fromans road & that the Tithables within three miles on each side work thereon.

Ordered the Court be adj'd. Till Tomorrow 8 oClock:

WILLIAM GOE.

At a Court held for Yohogania County March 29, 1780.

Present Edward Ward Thos. Smallman John McDonald Joseph Bealor Joshua Wright.

Crow v Dye. Then came a Jury towit, John Johnson John Robertson James Machen John Dean Thos. Spencer David Day Henry Newkirk Stephen Hall Samuel Devore Elija Rit-enhouse David Williams, James Peirce. Vdt. for Plantf & Judgt.

(254) Ordered that the Atty do Indict Gersham Hull for assaulting John McDonald.

Ordered that Gersham Hull be recognized to appear at the next Grand Jury Court to ansr. the Complaint of Jno. McDonald, himself in the sum of five thousand pounds with two Securities of in two thousand five hundred each, Hugh Brady & Tobias Mattocks undertook for the sd Hull.

Ordered that Andrew Heth do furnish the Court with fire & water & make an acct. of the same.

Ward v Robertson, order that dedim's. Isue for either Party.

Connel v Wells. then came a Jury towit, Stephin Ashby, Andw. Dye, W^m. Crow, Joseph Warner, Andw. Pierce, Robt. Creghead, Mos^s. Hollyday, Hugh Brady Tobias Mattocks John McComis, Girsham Hull Danl. Apelgate. Verdt. for Plaintiff L 5000 & Judgment.

On Motion George Roots, Administn. is granted him on the estate of John Gabrial Jones deceased. Thos. Smallman, Robt. Campbell, Joseph Skelton, Samuel Sampel Appraisers of the same.

On motion Andw. Heth Administn. is granted him on the estate of Patrick McElroy deceased. John Robertson, Gabl. Cox, Samuel Newil, Benjn. Keykindall, apprs. of the estate.

Braudy v Beever. then came a Jury towitt, John Johnson, John Robertson, James Spear, David Day, Henry Newkirk, Andw. Dye, Stephen Hall, Saml Devore, Elija Rittenhouse, Thos. Spencer, Joseph Warner, Jacheriah Connal. Verdt. for Plantff. & Damage L 2000.

Margaret Weever 12 days attendance on the above suit.

Katherin Unsetler 6 days, same.

John McComis 2 days, same.

Ward v Broadhead. N. Guilty with leave to put in what Plea he pleases.

(255) Andw. Dye v John Allintharp. Nt. Guilty & Join'd.

Ordered that Andw. Heth have the uper story of the Goal put into order for a Jury room.

James Spear v John Backingrig.

Ordered that a Ded'ms. Isue to take the depositn of Samuel McAdams & wife for Plaintiff.

Richd. McMahan v Arnold Evins. Non assum'st join'd.

Ordered that the Sheriff summon a Grand Jury to May Court.

Ordered that the Sheriffs settle their accounts at the May Court.

Ordered that a Dedimus Isue to take the deposition of Martin Shundon in a suit between John McDonald & Gersham Hull.

Ordered that Court be adjurnd till Court in Course.

EDWD. WARD.

At a Court held for Yohogania County April 24th 1780.

Present: Edward Ward, Joshua Wright, William Harrison, Samuel Nevill, Joseph Beeler.

Admin. is granted to Jacob Season of the Estate of Geo. Graves he having entred into Bond &c.

Ordered that Phil. Shute, Henry Season, Jas. Collins, and Wm. Campbell or any three do apprise the sd Estate.

Ordered that Benja. Die be summon'd to appear at the next Court to shew cause why John Fraser an Orphan should not be taken from him.

Present Jos. Beeler, Gent.

Ordered that the Sheriff do summon twenty four freeholders to attend as a Grand Jury against May Court.

John Brock } produced their Commissions as Deputy
Thos. Bond } Surveyors & took the Oath Accordingly,
David Steel }

Ordered that Jacob Lancaster Orphan four years old be Bound apprentice to David McLean to learn the Mystery of farming, to learn him to read write & Ciyher as far as the Rule of three, two suits of Cloathing, sufficient shirts stockings & shoes or equivalent, an Grubbing hoe — wedges.

Joseph Beeler came into Court.

Testimony was given to the satisfaction of the Court that he served as a private in a Ranging Company commanded by Capt. Evan Shelby raised in Maryland, & in the Service of the Crown, in the year 1755 and that he was at the time of his enlistment in the State of Virginia.

Same, that he served as Pack horse driver in the year 1764 in the State of Virginia, & received No satisfaction for the same.

Joseph Beeler sworn Col. of Militia. Commission read.

Samuel Cox sworn Lieut. Col. of Militia. Commission Read.

Inventory of the Estate with the settlement of Potter Smith returned. Adj. for R.

Ann Rolerson proved that John Robins was the father of a base born child begotten on her Body. Ordered that the sd Robins give security for the maintenance of sd child. Whereupon the sd Robins with John Lemon his Security come into Court & entered into Recognizance of two Thousand pounds each &c for the sufficient maintenance of sd Child, so as to indemnify the Parrish.

William Mitchell v John Bowlie. Disc'd. plaintiff.

Joshua Wright v Sampson Beever, Disc'd. plaintiff.

Rolison v Robins. David Steel S. B.

James O'Donald v John & Isaac Williams. Disc'd. Piff.

James Sterit v Skinner Hutson. Andw. Dye. S. B.

Peter Ellrod v Elija Hart. Atta Judgt & W. E.

Benjamin Wells v Samuel Wells. Attmt. Judmt. & O. Sale.

- (257) License is granted John Downer to keep an Ordinary at his House in Beeson's Town The ensuing year he having Complied with the Law.

Van Swearengen proved to the Court that he serv'd. as a subaltron officer in the Last war in a corps raised in the Virginia Service, and continued therein until regular discharged, and that he never recd. any Satisfaction or advantage under the king of Great Britains Procl. of 1763.

Thomas Gist proved to the satisfaction of the Ct. that he served as a Cadet in the year 1757, and an Ensign in the year 1758. and a Lieut. in the year 1760 in a redgmt. raise in the Virginia Service and employed in the Last war, and continued therein until regularly disch'd., and in the year 1762 he again served as a Lieut. in another Regmt. raised and Employed as afsd. and contd. therein until regularly discharged, and that he never recd. any satisfaction or advantage under the king's proclamation of 1763, except a warrant from Lord Dunmore for two thousand acres of land, and has ever since continued an Inhabitant of this State.

Admn. of the Estate of Philip Heath is granted to William Richman he having complid with the Law.

John Beal James Beal William Beal and Phil. Ross aptd appraisers.

Jacob Bowsman v John Ormsby. Injunction to stay waste.

Edwd. Ward v Daniel Broadhead. C. O.

Ed. Ward v Jno. Robertson. Bill & Time.

Ed. Ward v Dl. Broadhead. Plea Joind.

Indenture Mary Willson Samuel Semple proved ordered to be recorded.

- (258) Benjamin Keykindall Sworn Sheriff for one month.

Ordered that Court be adjourned until Court in Course.

EDWD. WARD.

At a Court held for Yohogania County May 22, 1780.

Present Edward Ward, Oliver Miller Thomas Freeman
Gent. Just's.

Colo. Joseph Beeler provd. that he served as a wagon Master from the State of Virginia in the late war between Great Britain and France and that he Contd. therein until regularly dischd. O. to be Certd.

Appraismt. and Sale of the Estate of Saml. Griffith decd.
ret'd. Or. R.

Gabl. Green Sworn Depy. Survey. Com. Read.

W^m. Colvin appd. Constable in the place of Jacob Knap.

Thomas Patterson Assinee of Thomas Eaby produced a Disch'd signed Adam Steven Liet. Colo. of the first Virginia Redgmt, for the service of the sd Thomas Eaby as Artificer [?] for the Time of his Inlistment in the late war between Great Britain & France, which Ordered to be Certified.

(259) Joseph Beeler Jun. Sworn Lieut. of Militia. Com. Read.

Indenture Elizabeth Hazelton to Christopher Beeler prov'd. by Joseph Beeler Sen. and Joseph Beeler Jun. two of the subscribing witnesses. § O. R.

Present Joseph Beeler Gent.

Abst. Edwd. Ward Gent.

David Duncan is appointed Gardian to John Farree Heir of Frederick decaasd. he having complied with the Law.

George Vallandingham Gent. Prest.

Edwd. Ward, Gent. Present.

Ordered that Thomas Fortner, And Vinson Fortner be bound to John Peters until they arrive to the age of twenty one, he learning them the Coopers Trade art and Mistery, and at the end afsd. Term give them the usual Freedom dues.

Deed of Surrender Jacob Knapp to William Chipley. Ackd.
O. R.

The Last Will and Testament of Stephen Richards decaas'd proved by the oaths of Charles Morgan and Samuel Park the two Subscribing Witnesses. O. R.

Ordered that Thomas Freeman and William Goe Gent settle with the Administratrix of the Estate of Saml. Griffith decaasd. and make return to the next Court.

Admn. of the Estate of Joseph Fortner decaas'd. is granted to John Peters he having complied with the Law.

Return of a Road from the new Store on Monongahala to the road Leading from Guests fort to Devores Ferry. Ordered to be confirm'd.

James Hodge Sworn Ensign. Commission Read.

- (260) Then came a grand Inquest for the body of this County to-wit: John Wall, Stephen Hall, Walter Wall, Robert Craighead, Moses Holliday, James Sparks, John Robertson, Mabary Evins, John Taylor, Andrew Nigh, Stephen Richards, Henry Sawings, Samuel Devoir, Andrew Dye, John Johnston, who were Sworn, recd. their Charge and retired to their Chamber.

Thomas Smallman Gent. Sworn Sheriff. Commission Read.

Jeremiah Wright is recom'd. as Liut. of Militia in the stead of David Cox who has removed out of the County.

William McCarmick. recom'd. as Capt. in the stead of John Minter who has resigned.

Samuel Wilson recom'd. as Liut. in the stead of the said McCarmick, and William McKee ensign in the stead of the said Wilson.

Ordered that a former order of this Court recom'ding Hezekiah McGruder as Capt. of Militia in the stead of Capt. Freeman be set aside, and that Thomas Prother be recom'd. in the stead of the said Thomas Freeman.

Richd. Noble is recom'd. as Liut. in the stead of Thomas Prother, and Thomas Brown Jun. be recom'd. as Ensign. Rich'd. Beall Capt. in the stead of Capt. Joseph Ford who is removed, and Robert McGlaughlin, Liut.

Ordered that John Frazee Orphan of John Frazier, decd. at the request of his mother be bound to James Wilson until he arrives to the age of twenty one years of age, he being at this time ten years old, and learn the sd John Orphan the Trade art and Mistery of a wheel wright and Teach or cause to be taught to read and Wright the English Language and to Cypher as far as the rule of three, and at the end of said Term give him two Suits of Cloathes one of which is to be New.

- (261) Ordered that Court be adjourned until tomorrow morning 9 oClock.

EDWD. WARD.

Court met according to adjournment May 23^d. 1780.

Present Edward Ward Joseph Beeler George Vallandingham Samuel Newell William Harrison, Thos. Freeman.

issues.

Wherry v White contd.

Brounles v Douglas. do.

Shilling v Newkirk. do.

Do. Do. Do.

same v Fortney Do.

Fullum v Johnson. Do

Bouseman v McGoldrick do.

Pentecost v Briscoe do.

Shilling v Taylor do

Hawkins vs Clarke do

same v Kuykendall do

Ward vs Thorn do

Sample v McKensie do

Beall v Finn do

same v McMahan do

Neville v Guest do.

Cresop v Swearengen do

Campbell v Beall. do

(262) Fullum v Johnson contd.

Same v Same contd.

Same v McComish contd.

Andrew v Johnson do

Same v Same do

Heth v Bruce do

Christie v Heth do

Same v Same do

Caldwell v Fry do

Boley v Springer do

Same v Same do

Ward v Wells do

Vance v Williams do

Riggle v Die do

Morroson v Vanater do

Bradley v Boly do

Curry v Wells do

Waller vs Springer do

Pierce v Evans do

Hogland v Laughlin do

Cox v Betsman do
Vanatre v Parkinson do
Dawson v Kirkpatrick do
Froman v Boyce do
Crooks v Hoagland do
Pierce v Evans do
Tyger v Boley do
Boyce vs Froman do
Caldwell v Hoagland do
Wetzell v McKelwaine do
Caldwell v Corn do
Spears v McMahan do
Day v Deane Do.
Beler v Inks do
Wright v Hart do.
Boyce v Froman contd
Mooney v Ricord do
Boyce v Froman do
Same v Same do
Same v Same do
Boling v Norris do
Miller v Humble discontd.
Shilling v Newkirk contd
Crow v Pierce do
Crow v Dye Do.

Presentments at issue.

State vs

Richard McMahan discharged
defendt. paying Costs.
vs W^m. Christy. do
vs Jno. McClellan do.
v — Parsons do.
vs Agnes Irwin do
vs Geo. Lintenberger do.

Common Orders.

Wilson Exrs. v Lynch &c. W. E.
Reddick v Ross W E.

- Saml. Bruer & ux v Tacey W. E.
 Dye v Tharp W E.
 Henderson v Evans W E.
 Steel v Hamilton W E.
 Burns v Louderback W. E.
 Barrickman v Harry W E
 Same v Wood W. E.
 Lindsey v Hamilton W E
 Pierce v Evans W. E.
 (263) Heth v Stokes W E
 Guest v Cornwall W E.
 Forrester v Murphy W E.
 Ward v Clarke W E.
 Boley v Orr W E.
 Johnson v Springer W E.
 Cooke v McCastlin W E.
 Cresops, Exrs. v Campbell W E.
 Johnson v Kates W E.
 Pentecost v Jones W E.
 Fossett v Hall W E.
 Lynch v Hall W E.

Writs Enq'y.

- Hawkins v Wheat contd
 McIlroy v Templin abated by plaintiffs death.
 Same v Same Same Order.
 Roleson v Lowry contd.
 Fry v Tilton contd
 White, Jun. v Johnson do.
 Fry v Tilton do
 Swigart v Murphy do
 Brashiers Admr. v Brashier Do.
 Whitesides v Girty do
 Froman v Dean discontd
 Elliott v McIntosh contd
 Same v Same do.
 Smallman v Such do.
 Day v Hansberry do
 Richards v Boley do.

Gist v Waller do
Same v Hall do
Same v Boyles do
Beeler v Walker do
Tigart v Chamberlain contd
Same v Same do
McKee v Davison Do
Same v Same do
Fossett v Meeks do
Ells v Roach do
Kidd v McConnell do
Lynch v Jones do
Same v Berwick do
Drenning v Bay do
Braden v Elliott et als. do.
McElry v McMahan do
Ferguson v Heath do
Protsman v Hill do
Norris v Vineyard & ux do
Bentley v Eglin do
Clarke v Boley do
Hoffman v Leatherman do
Munn v Crawford do
McAllister v Corn do
McGlaughlin v Wood do
Newill v Robison Do
Nevill v Wiseman Do.
Neville v Holliday Do.
Wells v Quick Do.
Grubbs v Carter Do.
Taber v Applegate

Imparlances.

Spears v Beckett Admr. N. Guilty.
Kersey v Springer N. Guilty
Henderson v Douglas N. Guilty
Stocker v Aicklen N. Guilty
Boley v Manning Do.
Same v Same Do.

- Day v Dean Do.
 McCulloch v Taylor do.
 Kinkaid v Henderson do.
 Decker v Jacob contd
 Kuykendall v Colvin N. Guilty.
 (264) Thompson v Hopkins, paymt & sett off.
 Beeler v Scott, Infancy.
 Nolls v Quick N. Guilty
 Sills v Burns, Do.
 Spivy v Rickets, do.
 Kinkead v Henderson, do.
 same v same, do.
 Spears v Jones, do.
 Berry v Crawford, contd.
 Bousman v Ormsby. N. Guilty &c.
 Keykendall v Bogard, Non Assumpsit. Sp. Bail.

Plurias Capias.

- Stewart v Purdie A P. Capias.
 Miller v Parkison do.
 Dun v Stewart, do.
 Johnson v Evans, do.
 Dye v Brent, do.
 Steel v Stevens, Do.
 Beavers v Mahal, do.
 same v Miller, et als. do.
 Chambers v Evalt Co
 Chambers. Inft. v. Evalt C O.
 Ward v Broadhead W. E.
 Kuykendal v Decker, Imparlance.
 Sheaff v Downer do.
 Clarke v Clarke C O.
 same v same C O.
 same v Quinn P C.
 Conell v Poe & others Exors. P. C.
 Riddell v Goard P C.
 Logan v Miller P C.
 Mathews v McLean P C.

Boling v Wells, P C

Workman, Assec. v Saltsman P C.

Ross v Manning C O.

Miner v Blazier &c P C.

- (265) Thomas Freeman proved to the Court That he served as Dept. Comissy in the Last war between Great Britian & France & was regularly discharged. O. to be Certified.

David Vance being bound in Recogn. being called came into Court which ordered to be discontd, also the witness Recogn. discd. said Vance giving security for his good behaviour for one year and one day in the sum of ten thousand Pounds with one Security in the like Sum whereon the sd. Vance with Moses Holladay his Security came into Court & entered into Recg. accordingly.

Ordered that John Bradly be bound over to his good Behavior for a year & a Day in the Sum of two Hundred five Hundred Pound & one Security in the like sum, whereon the sd. Bradly with Jacob Bousman his security came into Court & entered into Recogn. accordingly.

Jacob Bousman — John Ormsby. order'd. a writ to stay Waste. Issue.

James Boys v John Atkins. then came a Jury towit. Zaddock Wright Hugh Stirling James Quick John Vanater, William Redick. Willm. Bruce Jacob Bousman John Springer Gabriel Cox Skinner Hutson Garsham Hull John Marshall. Verdt. for Plaintiff, Judt. L 30.

Enock Enis v William Hoglan. then came the same Jury as before. Verdit for pt. Judmt. for L 12.16.

Rich'd. McMahan v Paul Matthews. Then came the same Jury as before. Verdit. for pt. Judmt for L 73.10.

- (266) Ordered that James Innis, Thomas Gist, Thomas Warren, Hezekiah McGruder, James Eager, David Ritchie, Henry Taylor, Benjamin Johnston, Samuel Semple, Charles Wheeler Jacob Bouseman, Joseph Scott James Ewing, Samuel Johnston, William Lea, Andrew Heath, John Robinson, Thomas Moore, Jacob Beeson, Reuben Kemp, and Walter Wall be recommended to the Governor as proper persons to be added to the Commission of the peace, and that the Clerk certify to the

Govenor of the Names of those persons now named in the Commission of the peace who refuses to serve.

Ordered that Joseph Bealor & John Canon be recommended as proper Person for Corenors for this County.

On the petition of Dorsey Pentecost siting forth that he is desirous of Building and compleating a water Mill on the Eastern branch of Churteers Creek, and that he owns the lands on both sides of the Creek so that no person will be Effected by the overflowing from his dam. Ordered that the sd Pentecost have leave to build and compleat a water mill at the place aforesaid according to law.

Administration of the Estate of William Fulks decd. is granted to his widow Anne Fulks she having complied with the Law, and that Samuel Beeler Joshua Meeks, Garshom Hull and John Hull or any three of them Appraise the sd Estate.

John Dean proved to the satisfaction that he served as a soldier in a ranging Company in the late war between Great Britain and France and continued in said Service until regularly discharged. Ordered to be Certified.

David Livingston being bound in recognizance and no prosecutor appearing ordered to be Discharged.

Ordered that Wm. Bruce Capt, James McMahon, Lieut., Joshua Carman, Ensign, be recomd. as proper persons to serve as Officers of Militia.

Ordered that Thos. Rigdon, Lieut Andw. Nigh proper person as Lieuts. of Militia.

(267) The Grand Jury found the following Bills Vizt. vs Joseph Cox, for an assault on the Body of John Eliot; one against John Reed for Forgery being called pleads not Guilty, Whereupon the said John Reed with Hugh Sterling and Zadock Wright, his securities, held, himself in Ten thousand pounds the securities five thousand pounds each, for the appearance of the sd. John and answer to a Bill of Indictment Exhibited agt. him. and the said Joseph Cox held in the like sum of Ten thousand pounds and Hugh Sterling and Alexandr Eady his securities in the like sum of five thousand pounds Each for the sd. Josephs appearance to answer as afores'd.

Jesse Beezon and Robert Davidson appointed Constables, som'ed before John McDaniel Gent. to be Qualified.

The Grand Jury present the following Bills. against Garsham Hull: for an assault on the body of John McDonald N. G. ; against John Brackinrig an assault on Mary Spear, order a Capias Issue: against Do. assault on the Body of Jas. Spear, Cap. ; against Joseph Parkeson assault on the Body of Sarah Jacob. Cap. Issue.

Garshom Hull with Richd. McMahan & John Dean his securities come into Court and entered into recognizance for his personal Appearance at the Next Court to answer a Bill of Indictment exhibited agt. him, held in Then thousand pounds his Securities in five thousand each.

The Grand Jury found a Bill agt. Garshom Hull for an assault on John McDonald Gent. Ordered that Capias Issue.

(268) Ordered that Court be adjourned to Court in Course.

SAMUEL NEWELL.

At a Court held for Yohogania County June 26th 1780.

Present Samuel Newil, W^m. Harrison Joseph Becket Oliver Miller W^m. Goe, Present.

Alias Capias

Keykendall v Deckart. Imparlance.

Boxton v Peas P. C.

Caldwell v Wray P. C.

Masters v Benet P. C.

Cresops, Exrs. v Power agreed. G. Brant, Cost.

Keykendall v Creghead C O.

McDonald v Clerk P. C.

Johnson v Evins C O

M^cGee v Gambol P. C.

Taylor v Applegate C. O.

Sterling v Beevers. C O

Campbell v Quick P. C.

White v Williams P. C.

Crawford v Yates disctd.

Boxton v Norris, P. C

Enis v Spencer P. C

Leamon v Mattocks C. O.

Appearances.

- Smallman v Irwin A. C
 Same v same A. C
 Applegate v Evins A. C.
 Hutson v Whitacre A. C
 Ward v Broadhead C O
 Fleming v Cooper A. C
 Holladay y Beever A. C
 Moor v Taylor. A. C
 (269) Eliot v Cox C. O
 Steret v Hutson A. C
 Leaman v Holladay A. C
 Barrackman v Raymon A. C
 Crow v Humble disctd.
 McDonald v Hull A. C
 Protsman v Lypolt A. C
 McMachen v Bruce C. O
 Ellrod v Hart A. C
 Onsetler v Humble disctd.
 Seal v Whitacre Do.
 Spear v McIwain A. C
 Nesbit v Harden A. C
 Provines v Froman C. O
 Gilfilin v Tygart A. C
 Cuningham v. Louderback A. C
 Keykendall v Matthews C. O M^s. Holaday. A Bail.
 Warrin v McKenzey Disctd.
 Hutson v Deckart C. O
 Bradin v Vanater C. O
 Roleston v Robins C. O
 Keykendall v Fokes C. O
 Walker v M^cMachen & Wife C. O
 Farrin v Keykendall C. O Rt. McKee A. B.
 Vanater v Braden C. O V^m. Swearengen A. B.
 Smallman v Peterson A C
 Brown v McCurdy A. C
 Gambol v Beall A C.
 Keneday v McCollolloige disctd.
 Crow v Williams C. O Aw. Pierce A. B.

- Smallman v Broadhead. C. O
Smallman v Duncan C. O
Same vs same C. O
Morry Boyd v Humble C. O leave to amend writ.
Ward v Broadhead C. O
Crawford v Sharp A. C
McMachen v Evins C. O
Brady v — & wife dismisd.
Williams, Asse. v Crow C. O Joshua Wright A. B.
Records v Thomas C. O
Williams, Asse. v Crow C. O
Williams, Asse. v Crow C. O J^a. Wright A. B.
Boice v Workman. C. O
Cox v Campbell & wife
McAdams v Rarden A. C
(270) Cox & wife v Walker A. C
Jacobs v Parkison. disctd. P. for Cost.
Pentecost v McAdams disctd.
McIlhose v Colvan C. O
Paterson v Moor A. C
Sweringen v Fryer C. O
Sweringen v Brooks Imp.
Clerk v McDonald C. O
Pegg v Evins C. O
Appelgate v Evins C. O.
Cox v Davis & wife A. C
Cox v Thompson A. C
McMachen v Leamon discontd.
Campbell v Blackman A. C.
Beever v Mayhall A. C
Same v Miller Sen. &x. A. C
Hopkins v Johnson disctd.
Mathews v McClain A. C
Blackman v Peirce A. C
Same v Campbell A. C
Willson v Blackman A. C
Blackman v Willson A. C
Bonom v Sapington A. C
Boling v Wills A. C

- Johnson v Lindsey A. C
 Campbell v Totton A. C
 Same v Scoot A. C
 Campbell v Blackman A. C
 Ross v Blunck A. C
 Pierce v Hogland discontd. Cost pd.
 Keykendall v Colvin A. C
 Spivas v Record A. C
 Sweringen v Burrace C. O
 Harrison v Stuart A. C
 Downer v Lawson. A. C
 Anderson & Tod v Gibson C. O
 Grahm v Boys agreed.
 Mitchel v Downs. C. O
 Fokes v Boley C. O
 Fife v Holladay. C. O
 McColley v Hogland agreed.
 Newil v Irwin Imparlance.
 Commonwealth v Lindsey. C. O
 Corn v Elis A. C
 Same v Pelton A. C
 Anderson v Darby A. C
 Vanater v Graham & wife C. O
 (271) Jacobs v Workman & wife A. C
 Clark v McDonald A. C.
 Vanater Asse. v Creghead A. C
 Masters v Benet A. C
 McDonald v Clark A. C
 White v Williams A. C
 Little v Cherry C. O
 Peters v Crow A. C
 Peters Assne. v Same A. C
 Same v Same A. C
 Andrew v Singers A. C
 Vance v Williams discontd.
 Thomas v Egerton &c A. C
 Gumbwill v Bell A. C
 Downer v Waller A. C
 Bruce v Mattocks A. C

- Romine v McKinzey discontd.
Ward v Robertson. discontd
Records v Postelwait. Imparl. Jh. Alexr. S. B.
Miller v Vanater C. O
ODonald v Williams C O
McCleland v Beelor A. C
Redock v Irwin A. C
Humble v Crow A. C
Dunlavy v McAdams C. O
Campbell v Boley C. O
McDonald v Hull A. C.
Hall v Appelgate discontd.
Spencer v Cills A. C
Waller v Hatfield A. C
Conal v Vanater C. O
Cook v Hardin A. C
Quick v Vanater C. O
Miller v Burns C. O
Kelly v Campbell A. C
Hammon v McClain A. C
Jacobs v Parkeson A. C
Justice v Frame Impalnce.
Springer v Tygart A. C
Richie v Parkeson A. C
Chamber v Evalt C. O
Fokes v Boley A. C
Duglas v Henderson Contd.
Frame v Justice C. O
Vanater v Stockwell contd.
Jacobs v Parkeson A. C.
(272) Edward Mills v Jackman A. C
Elis v Johnson A. C
Barnet v McDowel A. C
Hill v Lyday Contd.
Same v Same Contd.
• Adams, Assne. v Richards C. O
Same v Same C. O
Thos. Cummin v Jas. Beggs, A. C
Paterson v Custer agreed

Nigh v Anderson A. C
 Hurley v Pharlon C. O
 Grubb v Carter A. C
 Briscoe v Appelgate A. C

Attachment, W^m. Crawford v Benjn. Wells. Attcht two steers three Cows two mares two colts two two-year Olds two Hogs two Smooth guns one Shot Pouch & a Poder horn. Judmt. & O. Sold.

Chancery.

Bouseman v Ormsby. Injunction bill.
 Indictments at issue.
 C. W. vs Gresham Hull. Assault & Battery.
 vs Jno. Reed. Misdemeanor.
 vs Joseph Cox. Assault and Battery.

(273) Ordered that the Certificates Granted Alexr. Fowler, Assne. of Lieut. George Brooks, of Lieut. Butler Stubbs, of Anguish McNeil, of Henry Dolway, himself as Lieut., served in the Last war & Reduced upon halfe pay be properly certified.

Benjn. Johnson Produced a Commission of Depy. Surveyor. Commission Read & sworn in.

W^m. Johnson Produced a Commission as Depy Surveyor it being read & sworn to accordingly.

On the Petition of Joseph Saxton setting forth that he is infirm & not capable of git his living. Ordered that he be allowed one Hundred Dollars for one Month & that the Sheriff pay it out of the Money deposited in his hands.

The last will and Testament of John Blakley deceased proved by the Oath of John Wright one of the Subscribing witnesses. O. R.

Robert Blackley took the Oath of Executor of the Last will & Testament of John Blackley decd., he having Complied with the Law.

Ordered that John Bougher, Thomas Morehead, Samuel Holms & Thomas Fasihe or any other three of them being first Sworn do appraise the personal Estate and slaves if any of John Blackley dec'd, and make return to the next Court.

Peter Nesevanger being charge before the Court for wilfully exhibiting a melitious and Scandelous Lybell, Ordered that he give security to answer the next G. Jury, to be held in L 20,000. and two suretys of L 10,000, W^m. Beagle held in L 1000, with Joseph Warner his securty L 1000, Matthew Beazle held in L 1000, with W^m. Beazle his secuity held in L 1000, Hugh Gundy with John Whiston his Security held L 1000, James Freeland held in L 1000, with Andrew White his security held

(274) L — Andrew White held in L 1000 with James Freeland his Security held in L 1000. for their appearance at the next G. Jury Court to Testify against the aforesaid Peter Nesevanger.

Duglass v Henderson. W^m. Frye S. B. & Impl.

Mordaicai Richards and Stephen Richards took the oath of Executors to the Estate of Stephen Richards Deceas'd, they having Complied with the Law.

Ordered that John Fossit Chas. Morgan, Richd. Boyce and Jacob Long or any three appraise the sd. Estate and make return to next Court.

Ordered that Summons Isue for Benj. Pegg and Catherine his wife to attend at the next Court to give farther Security for the administration of the Estate of Francis Hull deceas'd. on the Complaint of David Williams one of the Securities for the sd. Administration.

Inventory and appraisement of the Estate of Francis Hull decd. returned. O. R.

Frome v Justis. Robt. Henderson Spl. B. & Imp.

On the petition of James McGoldrick seting forth that he is desirous of building a water Mill on Becks Run and that the land on each side belongs to himself so that no person will be effected by the overflowing from sd. Dam, Ordered that he have leave to build and Compleat a water mill on sd. Run according to Law.

Ordered that John Decker be summoned appear at the next Court to shew Cause why he Detains Elizabeth the Daughter of Jacob Kuykendall and that he bring the sd Elizabeth with him before the Court as aforesaid.

John Springer — Michael Tygert. Henry Kasey S. B & Imp. Richd. Burns Sworn D. Sheriff.

- (275) Ordered that Paul Mathews be allowed two Thousand Dollars for Erecting a Whipping post Stocks and Pillory.¹

Gentleman deposetied

W^m. Goe, One hundred & fifty Dollars.

Oliver Miller Do. Do.

Joseph Becket One Hundred

Dorsey Penticost One Hundred

Samuel Newil One Hundred

to be Deducted out the money when Levied by the Sheriff.

Ordered that Court ajourn till Court in course

WILLIAM GOE.

At a Court held for Yohogania County on the 24 day of July, 1780.

present Saml. Newil, Joseph Becket, Joseph Beeler & Oliver Miller.

Appearances.

Jno. Ryan vs Peter Neiswanger. Trespass Case. C. O.

Samuel Cuninghame v Conrod & Andrew Louderback, Benjn. Keykendall, S. B.

Ann Roleston appeared in Court in Consequence of a Summons & confest having a base born Child & paid the fine 50 s. Lodge in the hands of Saml. Newil, Esqr.

Alexr. Steel appeared in Consequence of a Summons & confest the Crime of swearing four profain oath. 20 s. Lodged in the hands of Samuel Newil, Esqr.

- (276) Robert Sheerer bound in the sum of L 10000 & Philip Tabor in the sum of L 5000 his security to appear at the next G. Jury Court to testify for the State against Skinner Hutson, Minor Asterges.

Minor Asterges & Larince Roleston his Security bound in the sum of L 20,000 & his security in the Sum of L 10000 to appear at the next G. Jury Court to answer to what may be objected against him by the State.

Alexander McIntire bound in the sum of L 10000 & John Wall his security in the sum of L 5000 for his appearance at the next G. Jury Court to testify for the State against Skinner Hutson.

¹ See Introduction.

Philip Tabor v Thos. Applegate.

Then came a Jury, towit. Alexan. Steel, James Spear, Benjn. Pegg, Jacob Knight, Archibell Hull, John Boley, David Philips, Paul Mathews, Sampson Beever, David Richie, Robert Creghead, Edward King, W. Enqy, Judg. & Damage L 17, Plff.

Commonwealth v Ann Rardin, Nole prosequ. fees paid.

Thos. Smallman Sheriff Protest against th Goal.

Ordered that Court adjourn till Court in Course.

SAMUEL NEWELL.

At a Court held for Yohogania County, Augt. 28, 1780.

Present Edwd. Ward, Joseph Beelor, Richd. Yates, George Valandigin, Oliver Miller.

Richd. McMachen v James Bruce. Judgt. Wrt. of Enqy.

Same v Arnold Evins. Judgt. Wrt. of Enqy.

George Valandigin produced a Commission of Col. of Militia & Sworn to accordingly.

The last will & Testament of Abington George Colvin proved in Court. O. R.

John Miller is exemted from paying any future County tax.

(277) At a Call Court held for the tryal of John Jackson for Passing Counterfeit Continental Money.

Com. Wealth v Jackson by Evidence of Daniel Appilgate & Joseph McCune the sd. Jackson is acquitted.

23 forty Dollar Bills } Counterfeit lodged in the hands of
7 thirty Dollar Bills } Andrew Heth.

Ordered that Exn. Issue Hugh Brady agt. Sampson Beever David Steel & James McMullin on the Repleve. Bond given by them to replevy the effects of Sampson Beever on a Judgt. obtained by Hugh Brady & that it be indorsed no security or bail be taken.

Commonwealth v Garsham Hull. Jmdt. N. G. Joinder.

Commonwealth v John Brackenrig Indt. } N. G. & Joind.
same v same Indt }

Recognizance for John Brackenrig appearance at the Grand Jury Court, himself in two Thousand five Hundred Pounds upon each Inditiment & his Security W^m. Mayhall in the Same Sum.

Ordered that Summons Issue for Mordecai & Stephen Richard to give fresh security for the Estate of their Deceased father Stephen Richards.

Ordered that Summons Issue for Agness Stille to give fresh security for the Estate of of her deceased husband Jacob Stille.

Commonwealth v Joseph Parkeson, Ple'd. Guilty Jud't & dam'g. for Plf. L 300. David Richie security for fine & fees.

Commonwealth v Elizabeth Deckart Came into Court & Confest herself of haveing a base born Child & paid 50 s. fine. pd. to Richd. Yates, Gent.

Commonwealth v Sarah Jacobs, Came into Court & confest herself of haveing a base born Child & paid 50 s. fine. pd. to Richd. Yates Gent.

Commonwealth v Mary Boyd Came into Court & Confest herself of haveing a base born Child & paid 50 s. fine. pd. to Richd. Yates, Gentn.

Commonwealth v Catharin Develin failing to appear being sum'd. & return'd ex'd. Judgt. for 50 s. fine & the fees thereon accruing for haveing a base born Child.

Commonwealth v Ann Walker failing to appear being sum'd return'd Ex'd. Judgt. for 50s. fine & the fees thereon accruing for having a base born Child.

D'd. Richie v Jos. Parkeson } Imparlance.

same v same } Apearances John Wall S. B.

George Brown v Hugh McCrady. Apearnce, Nathaniel Blackmore S. B.

Jacob Knight v Tobias Wood Apearance. Mos. Holladay S. B.

(278) Michael Burk v Jacob Knight. Appearn. John Brotsman S. B.

Bill of Sale. W^m. Long to Morris Kaho. Acknowledged by W^m. Long and O. R.

Commonwealth vs James Dornin, Recognizance for his appearance at next G. Jury Court, himself in L 5000 & Thos Timons & Joseph McKinnen in L 2500 Each.

Commonwealth v Mordecai Richards. Recognized in the sum of L 5000 to appear at the next G. Jury Court & his Securities John Leamon & W^m. Mayhall in L 2500 Each to prosecute Jas. Dornin.

Commonwealth v Jeremiah Morgan, Robt. Peat & Stephen Richards. Recognized to testify for the Commonwealth at the next G. Jury Court against James Dornin, each in L 3000. Ordered that Court ajourn till Court in Course.

EDWD. WARD.

[Here six leaves have been cut from the end of the volume containing the foregoing records. But, as the entries last copied above, closing with the signature of EDWD. WARD, are at the top of the last page upon which there are any entries, most probably they are the last made in the volume, which, so far as we know, is the last record of a Court of Yohogania County, Virginia, held within the limits of Pennsylvania.

The EDWARD WARD whose name closes these records was the Ensign Edward Ward who surrendered the fort at the junction of the Monongahela and Allegheny rivers, to the French and Indians on April 17, 1754, and with his small command marched back and rejoined Washington at Fort Necessity.

ANNALS
OF THE
CARNEGIE MUSEUM
VOLUME II. NO. 3.

EDITORIAL.

THE present portion of the second volume of the ANNALS goes to press in December, owing to unavoidable delays in getting out the preceding part of the ANNALS. The publication of the Records of the Old Virginia Courts which claimed jurisdiction in western Pennsylvania has excited a great deal of interest in many portions of the United States, and the editor feels that a genuine service has been rendered to the cause of historical and genealogical research by committing to the printed page these old documents which throw a great deal of light upon the early history of the settlement of the region of which Pittsburgh is the metropolis. While the publication of the long lists of names of those who were concerned in law suits may to the casual reader appear to have been scarcely necessary, nevertheless these apparently dry and barren records furnish in many cases positive information as to the presence in the region of persons from whom are descended many of the inhabitants of the Ohio Valley. The editor is in receipt of letters from various persons high in station throughout the land expressing their gratitude and reporting that they have been able to settle definitely to their own satisfaction a number of questions of a genealogical character which have puzzled them heretofore. It is the intention of the Museum in the future from time to time to publish other historical documents which will serve to illustrate the story of the past.

PROFESSOR C. V. HARTMAN returned in the latter part of November from Costa Rica. His labors have resulted in the acquisition by the Museum of what is undoubtedly the largest collection of Costa Rican antiquities in the world outside of San Jose, the capital of that country. He purchased the collection of Padre Velasco, as has already been stated in these ANNALS, and which is temporarily on deposit in the Museum of the University in Philadelphia. He secured from the same source a second collection scarcely inferior in quality to the first, and was enabled to purchase the magnificent Troyo collection. As the result of excavations and explorations conducted by himself personally he was able to add a vast amount of material to that contained in the great collections which he secured by purchase. Over eighty large crates and boxes containing specimens have been received at the Museum through him, and when the collections are at last finally arranged and placed on exhibition the Carnegie Museum will be able to point with pride to the result of the work done during the summer and fall of 1903 in Costa Rica.

THE Museum has added very greatly to its collection of ethnological material representing the Indians of the plains. During the last few months fine collections gathered together under the supervision of Mr. George A. Dorsey of the Field Columbian Museum have been acquired. Objects representing the life of the Indians of the plains are rapidly disappearing and it is important that while such collections can be secured they be obtained and placed in the permanent custody of our larger museums. The most notable of the collections secured by the Carnegie Museum is a collection illustrating the manners and customs of the Crows.

THE Prize Essay Contest has just been brought to a close as this part of the ANNALS goes to press. Nine hundred and thirty-eight pupils from the schools of Pittsburg and Allegheny entered the competition, a larger number than in any former year.

THE expeditions sent to the West to prosecute paleontological researches have all returned and the results have been gratifying both in the quantity and the quality of the material obtained. The collections, which required two box cars to transport them to the Museum, were made in Montana, Wyoming and Kansas.

The Bayet collection has been brought in safety to Pittsburgh from Brussels and is in storage awaiting the time when it will be possible to place it on exhibition. There is at present no room in our crowded halls to display this beautiful assemblage of specimens.

PROFESSOR A. E. ORTMANN is engaged in classifying the large conchological collection belonging to the Museum. This work is being done at No. 419 Craft Ave., the house which the Museum has been compelled to rent temporarily in order to furnish elbow room for the staff. Mr. J. L. Lockwood has been added to the staff of the Museum in the section of Zoölogical Preparation. Mr. J. A. Shafer at the beginning of November, severed his connection with the Museum in order to accept a position tendered him by Dr. N. L. Britton of the New York Botanical Gardens. The vacancy thus created has not been filled as yet.

VIII. OSTEOLOGY OF OXYDACTYLUS.

A NEW GENUS OF CAMELS FROM THE LOUP FORK OF NEBRASKA, WITH DESCRIPTIONS OF TWO NEW SPECIES.

BY O. A. PETERSON.

The material upon which the present paper is based, was collected by the writer during the season of 1901 from the upper Loup Fork sediment near the source of the Niobrara River, locally known as the Running Water, in Sioux County, Nebraska. After a careful study of this material the present writer is of the opinion that a new genus and at least two new species are represented.

***Oxydactylus longipes*, gen. et sp. nov.**

The type (No. 918)¹ of this new genus and species consists of the skull, lower jaws, complete cervical region, five dorsals, and a few ribs, four lumbar, the sacrum and pelvis, the right scapula, proximal end of the ulna and radius, the unciform, magnum, and second row of phalanges, the right femur and distal end of the left femur, both tibiae and the hind feet practically complete. I have selected as the cotype a second skeleton (No. 886) which pertains to a somewhat smaller individual, but evidently belonging to the same species. It was found in the same geological horizon and at the same locality and consists of the following material: Skull, lower jaws, atlas, axis, four lumbar, sacrum, and pelvis. Excepting the scapula the fore and hind limbs are well represented.

In addition to these two skeletons, which supplement one another in an admirable manner, there were found, in the same locality, a number of other skulls associated with more or less skeletal material and pertaining to the same species. In the following detailed description of the osteology of *Oxydactylus longipes* this supplementary material will be used whenever it throws additional light on the subject, but in all such instances references will be made to the catalogue numbers of the various parts referred to.

¹ Nos. refer to the Catalogue of the Section of Paleontology in the Carnegie Museum.

GENERIC CHARACTERS.

Dentition. — $I_{\frac{3}{3}}^3 C_1^1 P_{\frac{4}{4}}^4 M_{\frac{3}{3}}^3$.

Teeth brachyodont, superior incisors little reduced. No reduction in the premolars. The first upper molar narrower than the second, which is the broadest in the molar-premolar series. Third cervical vertebra the longest in the neck: the sixth with undivided inferior lamellæ. Limbs greatly elongated and slender. Trapezium present. Metacarpals entirely separated. Metatarsals separated with the exception of the palmar processes which are coössified. Phalanges without the plantar rugosities for pads which are present in the recent camels and llamas. Unguals high, narrow and pointed.

SPECIFIC CHARACTERS.

Cranium comparatively small. Third superior incisor as large as the canine. The first superior premolar two-rooted. Molars long and narrow. A short diastema between the third inferior incisor and the canine. The fifth metatarsal present and articulating proximally with the fourth by a distinct facet. Distally it is coössified with the fourth. The axis much shorter than the third cervical.

Superior Dentition. — In the type specimen (No. 918) (Pl. IV, Figs. 1, 2 and 3), the first and second incisors have dropped out, but the alveoles are open; they are each separated by a short diastema. A specimen (No. 667) in the collection, which is referred to the same species as the type, has the incisor teeth in position. These present characters similar to those of *Poëbrotherium*. They are small, sub-cylindrical in cross-section, with slightly expanded crowns covered by enamel. They show distinct wear in old individuals. This third incisor is present in the type and is a large caniniform tooth equaling the canine in size and similar to it in character. There is a long diastema between the third incisor and the canine; the latter, is situated just back of the maxillo-premaxillary suture and is a strong and slightly recurved tooth. The first premolar is separated by long diastemata from the canine and the second premolar. It is more obtuse in the present genus than in *Poëbrotherium*. Its greatest diameter is antero-posterior, and it is two-rooted. The second premolar is but little reduced and is very similar to that of *Poëbrotherium*. The median cusp is closely fused with the anterior and posterior cusps forming a sharp antero-posterior ridge of which the median cusp forms the summit. The second premolar is slightly shorter antero-posteriorly

than the third and fourth and is fixed by two strong roots. Pm. 3 is very similar to pm. 2, but has a much stronger internal basal cingulum and has a deep, narrow median valley, which is subject to considerable variation in different individuals. Pm. 4 differs from the others by having the internal crescent complete, and the anterior and posterior depressions of the external surface not so deep as in pm. 2 and 3. On the antero-external face of pm. 4 there is a prominent rib resembling the corresponding rib on pm. 4 in the recent camel and llama.

In *O. longipes* premolars —, 3 and 4 have undergone no reduction in size and little modification in form and resemble those of *Poebrotherium* and *Protomeryx*.²

The molars are brachyodont and closely resemble those of *Protomeryx*. The first is nearly one third longer antero-posteriorly than pm. 4. The succeeding teeth increase rapidly in length, the last molar being the longest by 2 or 3 mm. In width, the first molar differs from that in the recent camel and the llama. The latter genera, especially the llama, have the first molar the widest with a gradual decrease to the posterior portion of the last molar. In *Oxydactylus* the second molar is the widest while the first is the narrowest in the molar series. The ridges on the external face of the molars are quite prominent especially on the last tooth. This character is subject to individual variation. On molar 2 there are no basal pillars such as are found in the recent camel. The molar teeth in the present species are narrow and long, differing in this respect from another species of *Oxydactylus* which will be described later in this paper.

Inferior Dentition. — (Pl. IV, Fig. 4.) The similarity of the superior incisors to those of *Poebrotherium* is repeated in the inferior series. Taken as a whole, the inferior incisors are rather small in comparison with those of the llama, the median pair being the smallest. The incisors are placed nearly as close together as they are in recent genera, and are well adapted for cropping grass. As stated above, the superior incisors are separated by short spaces; they are comparatively small and seem ill adapted for their required function in feeding. It would seem that there were cartilaginous pads on the premaxillaries which assisted to some extent at least in this operation. The canine is very unlike that of *Poebrotherium*. The latter has the canine greatly compressed laterally, the antero-posterior diameter be-

² *Memoirs Am. Mus. Nat. Hist.*, Vol. I, Part VII, p. 422, 1901.

ing the greater, and the crown lance-shaped; while the canine in *Oxydactylus longipes* is a strong, slightly recurved, and perfectly caniniform tooth. This latter character seems already to have been present in *Protomeryx* the successor of *Poebrotherium*. There is in *O. longipes* a short diastema in front and a long one back of the canine. The first premolar is strongly two-rooted, somewhat compressed laterally and has a simple subconical crown. The tooth is comparatively as strong as is that in *Protomeryx*. In *Oxydactylus*, as in all other genera known from the Oligocene and the Loup Fork, the first premolar is separated by diastemata from the canine and the second premolar. The second and third premolars are trenchant, laterally compressed, and are very similar to one another in character. The third has a more distinct anterior basal cusp and a small pit on the triturating face near the posterior edge. The fourth premolar has the antero-internal cusp less developed than in *Poebrotherium*. This tooth is widest posteriorly, the internal ridge extending backward from the apex of the median cusp, thus forming with the external wall a shallow valley. This tooth on one side of the jaw differs from that on the other, as described above, in having the apex of the median cusp interrupted by two strong ridges, extending well down on the internal face of the tooth. The posterior valley is also less apparent. There is a gradual increase in length antero-posteriorly from pm. $\frac{1}{1}$ the shortest to m. $\frac{3}{3}$ which is the longest tooth in the mandible.

The inferior molars like the superior are long and narrow, and have a general resemblance to the molars in the recent camel and the llama, with the important exception that the basal pillars are entirely absent in *O. longipes*. The fifth crescent of the third molar varies in size in different individuals as has been observed in other genera of this family.

The Cranium.—The exceptionally well preserved skull and lower jaws of the type (No. 918), Pl. IV, Figs. 1, 2 and 3, deserve a rather complete and detailed description.

For the most part the sutures are distinguishable and the skull is otherwise quite complete. The extreme posterior part of the sagittal crest and the superior region of the supra-occipitals were missing when collected.

The cranium is comparatively small, elongate, and narrow. The facial region is especially long. The orbit is small in comparison with that of the llama and more ovate in shape, the greatest diameter

being the antero-posterior. It is placed nearly as far back as in the llama, and is closed behind by a bony bridge as in the latter genus. The inclosing of the orbit seems to have been completely accomplished in the genus *Protomeryx* while in *Poebrotherium* the orbit is still open.³ The skull has the upper contour somewhat similar to that of the recent camel, especially the frontals and parietals.

The sagittal crest is low, but well defined, and is nearly in line with the frontals, as in *Procamelus occidentalis*.⁴ Slight crushing has taken place in the posterior region of the skull in the type, which in Pl. IV, Fig. 1 gives a slightly more depressed appearance to the supra-occipital region, than would otherwise be the case. There are cavities below the nasals and above premolars ³ and ⁴. These cavities seem quite a constant feature among the known Loup Fork Camelidæ. The zygomatic arch is slender and the malar process deeply notched to receive the corresponding wedge-shaped process of the squamosal. In the antero-superior region of the orbit there is a deep notch similar to that in *Poebrotherium*. This notch is also present in the recent genera, though not so deep. The crano-facial axis is straight. The occipital condyles seem to be subject to some variation; in some cases they are rather high and narrow, while in others they are rounded, similar to those of *Poebrotherium*. In the type the condyles are high and narrow; inferiorly they are separated by a groove which extends across the accessory facets on the basi-occipitals, as in the camel and the llama. In *Poebrotherium* this groove is entirely wanting, as is also the accessory surface for the inferior arch of the atlas. The supra-occipitals in *O. longipes* are high with prominent lambdoidal crests. The parietals are comparatively long, thus forming a longer, but somewhat narrower, brain case, than is seen in the llama, and more like that of the camel. In *Oxydactylus* the sagittal crest is thin and much higher than in the recent genera, and also differs from the latter in its almost rectangular contact with the elevated inion. In the camel the superior part of the supra-occipitals forms a broad and rather flat triangular surface where they meet the sagittal crest, which is low and short. In general appearance this region of the cranium of *O. longipes* more closely resembles that of the camel than the llama.

The zygomatic process of the squamosal is short in comparison with that of the camel and the llama, but as in the latter genera, is tapered

³ *Bull. Am. Mus. Nat. Hist.*, Vol. X, pp. 114, 115, 1898.

⁴ "U. S. Geogr. S.," Vol. IV, Part 2, Plate LXXVII, 1877, Lieut. G. M. Wheeler.

off to a thin point, which is received into the deep notch of the jugal. The glenoid cavity is a broad flat plate of bone with great antero-posterior extension, as in the recent camel. In the latter the articulation for the condyle of the mandible is continuous with the glenoid process at its internal margin, while externally the surface is interrupted by a broad shallow groove. This character is repeated in *O. longipes*, but the glenoid process is very much less developed in the latter genus. In the llama the glenoid cavity is much shorter antero-posteriorly and is entirely separated from the glenoid process by the broad shallow groove referred to above. The postorbital process of the jugal meets the corresponding process of the frontal, completely enclosing the orbit posteriorly. Anteriorly the jugal appears to extend farther than does that of the llama and the rugosity for the attachment of the masseter muscle is more prominent than in the recent genera.

The lachrymal sutures are discernible along the junction with the maxillary and this bone extends proportionally as far down on the face as in the llama. The large *vacuity* characteristic of the Tylopoda is situated immediately above the lachrymal.

The frontals resemble those of *Poebrotherium* and are somewhat shorter than they are in the llama. Their widest diameter is above the orbits. Posteriorly, they are V-shaped and are received into a corresponding deep notch of the parietals. The supra-orbital ridges are well marked and terminate in the downward projecting supra-orbital processes. Anteriorly the frontals extend no farther down on the face than they do in *Poebrotherium*. The fronto-nasal sutures present a W-shaped character, sharper than that which is found in the llama.

The nasals are long and narrow splints of bone overlapping the premaxillaries. As is well shown in Pl. IV, Fig. 2, the posterior process of each nasal is lance-shaped with blunt processes laterally and joins the maxillary close to the facial vacuity, from which point the suture extends anteriorly in a gently curved line constantly decreasing the width of the nasals which are only 15 mm. wide at the anterior end. On the whole, the nasals are proportionally shorter in *O. longipes* than they are in *Poebrotherium*, but much longer than in the llama.

The paroccipital processes are very close to the occipital condyles and are long, broad, and placed obliquely to the long axis of the skull. The auditory bullæ are filled with cancellous tissue and are relatively smaller than in *Poebrotherium*. Their position is somewhat

oblique to the long axis of the cranium and they do not crowd the basi-sphenoid as in *Poebrotherium*. The bullæ are separated from the paroccipital processes by a heavy, rounded ridge extending as low down as the rest of this entire region with the exception of the paroccipital processes. The pit for the stylo-hyal is comparatively smaller than in the recent genera, and, like that of the llama, is deep and distinctly separated from the styloid groove. On the anterior apex of the bulla there is a sharp conical process somewhat similar to that seen in the camel. The external auditory meatus is as large as that of the llama and has nearly the same relative position. The tympanic region in *O. longipes* resembles that of the llama more clearly than that of the recent camel.

The pterygoids are comparatively narrow and are not expanded posteriorly as in the recent forms, especially the llama, but the hamular processes are nearly as well developed as in the Tylopoda in general.

The anterior extent of the palatines can not be ascertained in the type specimen. The pterygoids are moderately long and heavier than in the llama, ending in the hamular processes already mentioned. The posterior nares are long and narrow with the anterior border V-shaped and extending as far as the posterior border of the third molar. The palatine fissure between the posterior apex of the alveolar border of the maxillary and the pterygoids is very shallow. In the llama the posterior nares, the palatine foramen and the palatine fissure are subject to so much individual variation in position, and in some instances also in shape, that they are of little value for purposes of classification. Posteriorly the delicate vomer is broken away in all the specimens at hand, but the rapidly tapering presphenoid would indicate that the vomer has a posterior extension similar to that of the recent forms.

As in *Poebrotherium* and *Protomeryx* the maxillaries are long and low. In front of the jugo-maxillary suture there begins a long heavy ridge which extends well in front of the deep depression on the upper part of the maxillary situated above premolars ³ and ⁴. This ridge is entirely obsolete in the recent forms and in these this surface presents a more regularly rounded appearance. In *O. longipes* as well as in other Loup Fork forms the anterior part of the maxillary expands rapidly to meet the posterior margin of the premaxillary. Thus the facial region is constricted behind the premaxillaries. Owing to the much more elongated muzzle of *Poebrotherium* the corresponding ex-

pansion of the maxillaries is more gradual in that genus. In *O. longipes* as well as in other Loup Fork forms the anterior part of the maxillary expands rapidly to meet the posterior margin of the premaxillary. Thus the facial region is constricted behind the premaxillaries. Owing to the much more elongated muzzle of *Poebrotherium* the corresponding expansion of the maxillaries is more gradual in that genus. In *O. longipes* the palatine plates of the maxillaries are proportionally shallower than they are in the recent forms, and, as in the latter, they extend well in front of the canines.

The premaxillaries are comparatively heavy especially at the supero-anterior margin, and they are expanded laterally as much as they are in the llama, forming an ovate and oblique narial opening. In *Poebrotherium* the superior portion of the premaxillary is much broader than that of *O. longipes*, which again is much broader than in the recent genera. In *Poebrotherium* the premaxillaries are in contact with the nasals throughout one third the length of the latter, as is the case also in *O. longipes*. In the recent genera there is an anterior process of the maxillaries, which, together with a shortening of the nasals, has reduced the contact of the latter elements with the premaxillaries. The palatine plates and the alveolar border of the premaxillaries are heavy to accommodate the superior incisors. The anterior palatine foramen is opposite the third incisor. In a number of different individuals of the family Camelidæ, both recent and extinct, which have been examined, the position of the anterior palatine foramen seems to be subject to considerable variation. Sometimes they are anterior to the lateral incisors, again directly opposite, while they will often be found nearly posterior to that tooth.

The Foramina. — The supra-orbital canal, as in *Poebrotherium*, is placed well forward on the frontal and as in the recent camel it is near the median line. In the llama the position of these foramina is more lateral and also more posterior. The infra-orbital foramen is above the anterior part of molar \perp practically in the same position as in recent genera, except that in *O. longipes* the foramen is closer to the alveolar border. The lachrymal foramen is single and situated within the orbit as in the llama. The anterior palatine foramen is opposite incisor 3 , and the posterior is situated anterior to pm. \perp . The optic foramen occupies the same relative position as in the llama; that is, immediately anterior to the large opening formed by the confluent foramen rotundum and lacerum anterius. The foramen ovale, as in

the llama, is separated from the lacerum medium only by a long thin bridge. The carotid canal is separated from the posterior lacerated foramen as in the llama and differs in this respect from that of the recent camel where the two canals have a common exit. The condylar foramen is located well back under the anterior edge of the accessory facet and is not visible from a direct palatine view of the skull. The postglenoid foramen is situated posterior to the glenoid process and is in appearance very similar to that of the recent camel. On the superior wall, at the base of the zygomatic process of the squamosal there is a perforation somewhat smaller than the corresponding foramen in the llama, and, as in the recent camel, it is situated in advance of the postglenoid foramen. There is a deep depression and a foramen superior to the exoccipitals similar to the foramina found in this region in recent forms. In a direct back view the foramen magnum appears somewhat triangular. Its superior border is slightly emarginated, the lateral borders being almost vertical, while the inferior border is V-shaped and terminates in the groove which separates the accessory facets.

The Mandible. — (Pl. IV, Fig. 1.) The mandible is long and slender. The symphysis is long and the rami firmly united, displaying little or no trace of the suture, which is also true of the recent forms. The region anterior to the continuous molar-premolar series is comparatively heavier than that of the recent genera, owing to the presence of all the premolars. In this region there are also two slight constrictions, one in front and one back of pm. τ_1 , which are not present in the recent forms. The ascending ramus compares well with the recent forms, especially the llama. The coronoid process is high, thin, and projects slightly backward at its extremity. The condyles have a comparatively greater transverse extension than in the recent forms. There is a strong hook-like process on the angle below the condyle, similar to that in the recent camel. In the llama this process is less pronounced. The masseteric fossa is much deeper than in the recent camel. In size, depth, and location it is more nearly like that of the llama.

The Foramina. — The inferior dental foramen is large and occupies a position similar to that of the recent forms. The mental foramen is placed low down on the jaw directly under the first premolar.

Cranial and Dental Variations in Lama huanaco. — In connection with the dental characters and some osteological features of the

cranium, it may be of interest to state some observations made upon a series of twelve skulls of *Lama huanaco*, which were taken from one and the same herd of upwards of one hundred animals, at Cape Fairweather, Province of Santa Cruz, Argentine Republic, South America, by Mr. J. B. Hatcher and the writer, during their explorations in that country.

The chief differences in structure and variations in position are observed in the third upper premolars. In some cases this tooth on one side occupies its natural position with its greatest diameter directed antero-posteriorly, while the corresponding tooth on the opposite side is placed transversely to the long axis of the alveolar border;⁵ the external face thus becomes anterior, and by wear a most peculiar sharp transverse crest is developed on the anterior border of the tooth. In some instances the tooth on one side has two strong fangs and is naturally placed in the alveolar border, while the opposite tooth is set crosswise in the jaw and has only a single internal root, the external being seemingly absorbed by pm.⁴ In one case the third premolar is present and well developed on one side and on the other side the corresponding tooth has dropped out and the alveole is entirely closed. In an old individual the third upper premolar is absent on both sides and the alveole on one side is entirely closed, while that of the other side contains a minute root, which, to judge from its soft spongy character, one would be justified in saying never carried a crown. (See Figs. 1 and 2.)

Another somewhat less noticeable character is the position of the inferior incisors. In the majority of cases the incisors have a recumbent position while frequently an individual especially an old one will be noticed with that series in an almost vertical position.⁶

The anterior palatine foramen and the posterior nares are quite variable in different individuals. The anterior palatine foramen is sometimes long and narrow and either somewhat anterior to the lateral incisor, directly opposite to it, or occupying a position posterior to it. Again the anterior palatine foramen may be shorter and broader, more oval in shape, and vary in position, with reference to the lateral incisors.

⁵In one case the fourth premolar has this transverse position while the tooth in front of it occupies its natural position in the jaw.

⁶In the collection is a skull and lower jaw of an adult female with but two incisors in the right mandible, while the left has the normal number.

The posterior nares are most remarkably variable, especially as to their shape, which ranges from a narrow lance-shaped to a wide U-

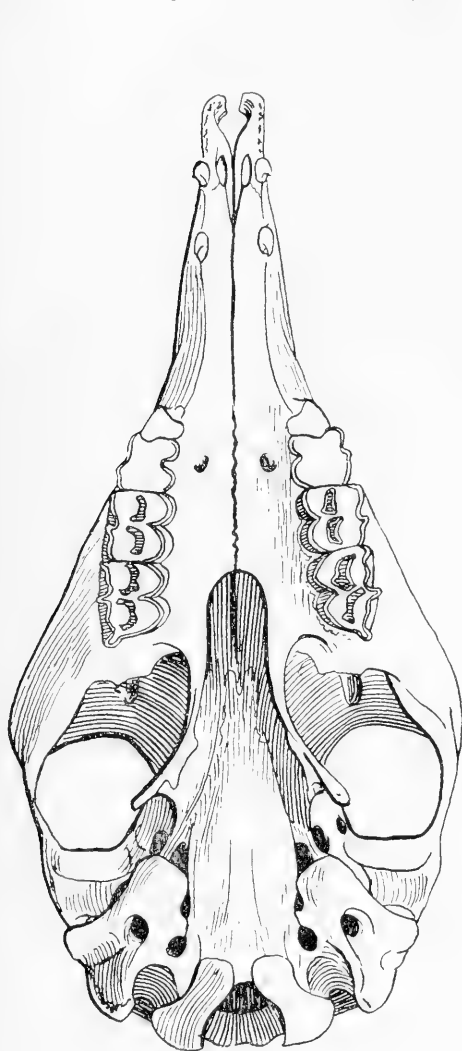


FIG. 1.

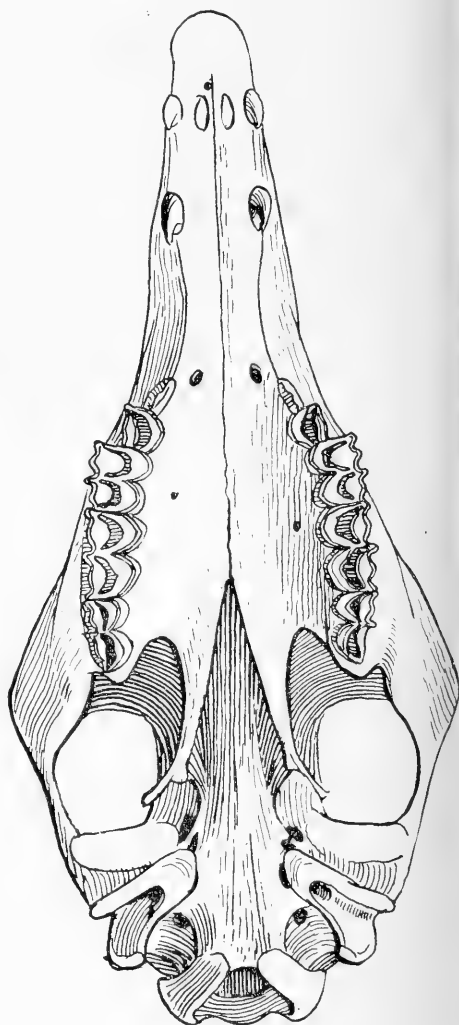


FIG. 2.

FIGS. 1 and 2. Palate views of skulls of two guanacos taken from the same band, at Cape Fairweather, Patagonia, showing remarkable individual variation in dental and cranial characters.

shaped anterior extremity. The position of their anterior border is also variable. Furthermore, the palatine fossa in different individuals varies in depth. (See Figs. 1 and 2.) Other differences might be pointed out, but they are less noticeable and are not very likely to be used in distinguishing one species from another.

From the observations noted above it may easily be seen how mistakes are unintentionally and sometimes unavoidably made in referring fragmentary material to the proper species or even genus.

COMPARATIVE MEASUREMENTS OF THE SKULL AND TEETH.

O. longipes. *C. bactrianus.* *L. huanaco.*

Greatest length of skull.....	340 mm. [†]	540 mm.	305 mm.
Occipital condyle to apex of premaxillaries.....	318 mm.	496 mm.	287 mm.
Greatest expanse of skull at postorbital processes	126 mm.	241 mm.	150 mm.
Length of sagittal crest.....	95 mm. [†]	100 mm.	45 mm.
Length of nasals, median line.....	98 mm.		45 mm.
Length of palate from posterior.....			
Length of nares to apex of premaxillaries.....	182 mm.	281 mm.	150 mm.
Greatest breadth of palate including alveolar borders at m. 3.....	85 mm.	154 mm.	85 mm.
Greatest constriction of palate back of pm. 1....	20 mm.	31 mm.	17 mm.
Length of continuous molar-premolar series.....	102 mm.	152 mm.	70 mm.
Length of diastema between incisor 3 and the canine	13 mm.	10 mm.	18 mm.
Length of diastema between canine and pm. 1 ..	14 mm.	25 mm.	
Length of pm. 1 antero-posteriorly	9 mm.		
Length of diastema between pm. 1 and pm. 2 ..	18 mm.		
Distance from canine to continuous molar-pre- molar series.....	40 mm.	91 mm.	55 mm.
Length of pm. 2	11 mm.		
Greatest breadth of pm. 2	6 mm.		
Greatest length of pm. 3.....	14 mm.	16 mm.	
Greatest breadth of pm. 3.....	20 mm.	15 mm.	
Greatest length of pm. 4.....	14 mm.	23 mm.	10 mm.
Greatest breadth of pm. 4.....	10 mm.	22 mm.	13 mm.
Greatest length of m. 1.....	19 mm.	34 mm.	16 mm.
Greatest breadth of m. 1.....	16 mm.	31 mm.	21 mm.
Greatest length of m. 2.....	23 mm.	44 mm.	21 mm.
Greatest breadth of m. 2.....	20 mm.	31 mm.	21 mm.
Greatest length of m. 3.....	25 mm.	45 mm.	26 mm.
Greatest breadth of m. 3.....	20 mm.	25 mm.	20 mm.
Distance from apex of premaxillaries to anterior margin of orbit.....	180 mm.	250 mm.	165 mm.

[†] This indicates the length measured by comparison with other individuals.

Distance from anterior margin of orbit to supra-occipitals.....	170 mm.	285 mm.	156 mm.
Antero-posterior diameter of orbit.....	45 mm.	67 mm.	50 mm.
Infero-superior diameter of orbit.....	36 mm.	63 mm.	50 mm.
<i>Mandible.</i>			
Greatest length of mandible including incisors...	280 mm.	446 mm.	254 mm.
Greatest height of mandible including coronoid process.....	150 mm.	225 mm.	158 mm.
Height of coronoid process.....	48 mm.	77 mm.	50 mm.
Depth of ramus at m. 3.....	48 mm.	67 mm.	43 mm.
Depth of ramus at pm. 1.....	25 mm.	36 mm.	20 mm.
Length of diastema between canine and pm. 1...	17 mm.	30 mm.	
Length of pm. 1 antero-posteriorly.....	9 mm.		
Length of continuous molar-premolar series.....	104 mm.	155 mm.	73 mm.
Length of diastema between pm. 1 and pm. 2....	17 mm.		
Distance from canine to continuous molar-premolar series.....	45 mm.	110 mm.	63 mm.
Length of pm. 2.....	10 mm.		
Breadth of pm. 2.....	5 mm.		
Length of pm. 3.....	12 mm.		
Breadth of pm. 3.....	5 mm.		
Length of pm. 4.....	12 mm.	24 mm.	12 mm.
Breadth of pm. 4.....	7 mm.	16 mm.	8 mm.
Length of pm. 1.....	18 mm.	32 mm.	15 mm.
Breadth of pm. 1.....	10 mm.	28 mm.	13 mm.
Length of pm. 2.....	23 mm.	44 mm.	18 mm.
Breadth of pm. 2.....	14 mm.	26 mm.	15 mm.
Length of pm. 3.....	31 mm.	57 mm.	30 mm.
Breadth of pm. 3.....	13 mm.	21 mm.	15 mm.

The Vertebral Formula. — The vertebral formula in *O. longipes* appears to be as follows: Cervicals seven, dorsals twelve, lumbar seven, sacrals four and caudals fourteen (?).

In the type (No. 918), the cervical region and the sacrum is complete; there are six dorsals and four lumbar represented, but no caudals. While the caudal region is conjectural the writer is firmly of the opinion that in other respects the vertebral formula is correct, in view of the fact that it agrees with that of the recent Tylopoda, and was perhaps fully established in the Uinta representatives.⁸ A skeleton (No. 562) which is referred to the genus *Oxydactylus* and has the complete cervical region, the five anterior dorsals, three or four of the

⁸ In *Bull. Am. Mus. Nat. Hist.*, Vol. X, p. 107, 1898, Wortman describes *Protylopus petersoni* as having four sacrals, seven lumbar, and intimates that there are twelve dorsals.

posterior dorsals, with the complete lumbar region and sacrum, all in position and articulated by their zygapophyses save at the break in the dorsal region affords additional evidence as to the vertebral formula.

The Atlas. — (Pl. V, Fig. 1.) The atlas is proportionally long and narrow, in this respect more nearly resembling *Poebrotherium* than the recent camel or the llama. The articulations for the occipital condyles are deeply concave, almost meeting inferiorly in the median line. Superiorly the notch is proportionally much narrower and somewhat deeper than in the recent forms. Externally each cotylus is notched like that of the recent Tylopoda. The dimensions of the cotylus are nearly alike in *O. longipes* and the specimens of the llama here used for comparison. The neural arches are also approximately of the same height. The spine is rudimentary as in the living genera. The keel on the inferior arch well developed but does not extend to the posterior margin as it does in the llama. There is a deep depression on either side of the median keel, which takes up the entire inferior surface of the atlas. Articular surfaces for contact with the accessory facets of the basi-occipitals are present on the anterior surface of the inferior arch, though absent in *Poebrotherium*.⁹ The articulation for the axis extends higher up on the arch and is comparatively narrower than in the recent camel and llama. This articulation is more vertical than in the llama and is quite distinct from that in any of the living forms.

Another character distinguishing the present genus from the recent camels is the posterior prolongation of the alæ. This seems to be the condition also in the other genera of the Loup Fork camels. In other respects the transverse processes are similar to those in the atlas of the recent camel and the llama. The foramen for the superior branch of the first spinal nerve compares well with that of the recent genera. Its posterior opening is located at the base and on the dorsal side of the transverse process.

The Axis. — (Pl. V, Fig. 2.) There is a striking similarity in the height and position of the neural spine and the shape of the odontoid process in the axis of *Oxydactylus longipes* and that of the recent camel. The spine overhangs the neural canal anteriorly as in the recent camel and extends backwards and gently upwards to the extreme posterior, border of the neural arch terminating above in a heavy and rugose tubercle. In the llama the spine does not over-

⁹ *Journ. Morph.*, Vol. V, No. 1, p. 28.

hang in front but rises more abruptly, terminating above in the rugose tubercle, or knob, which forms the summit of the spine. The anterior opening of the vertebrarterial canal is placed well forward and has the same lateral position as in the recent camel and the llama. The external opening is divided by a heavy bony plate, while that of the recent forms is undivided. A tendency to divide in the recent genera, especially in the llama, is sometimes shown by a short process on the anterior border of the opening. The odontoid process has a less spout-like appearance than in the llama, in this respect more nearly resembling that of the recent camel. The transverse processes and the inferior keel of the axis are proportionally lighter, and the latter is less rugose but more produced than in the camel and the llama, the expansion of the zygapophyses in *O. longipes* is not so great as in recent forms.

The length of the axis in comparison with that of the third cervical is entirely different from that which obtains in any of the living forms. In the recent camel the axis is the longest cervical. In the llama the axis and the third cervical are of nearly equal length, while in *O. longipes* the axis is much shorter than the third cervical.

The Third Cervical. — The third cervical vertebra is the longest in the vertebral series. The neural spine is proportionally higher than in the llama, but the laminæ, extending from the spine to the postzygapophyses as seen in the llama, are wanting. The spine is lighter, but higher, than in recent forms. The anterior and posterior divisions of the transverse process are nearly as well developed and occupy the same relative position as in the llama, *i. e.*, the anterior process is placed somewhat lower down on the centrum and is directed outward, downward, and forward, while the posterior process is situated higher on the centrum and is more nearly horizontal. The inferior keel is a prominent rugose tubercle and extends more downward, but is not so heavy as that of the llama. In the type, the keel does not extend so far forward as in the llama, while other individuals of the same genus show a faintly marked keel throughout the entire length of the centrum. The pedicles are deeply notched, especially anteriorly, to admit the passage of the spinal nerves. On this vertebra, there is no visible vertebrarterial canal. From the base of the prezygapophysis there is a sharp ridge extending posteriorly along the pedicle for some distance, which is similar to that in *Poebrotherium* and the recent forms. The postzygapophyses are heavier than the prezygapophyses and more expanded laterally.

Fourth Cervical. — The fourth cervical is essentially a duplication of the third, except that it is heavier. The spine differs from that in recent forms by being broader antero-posteriorly. It extends uninterruptedly backwards to the base of the postzygapophyses. The inferior keel is heavy and terminates in a rugose knob at the posterior inferior end of the centrum. There is no vertebrarterial canal.

The Fifth Cervical. — The fifth cervical is about 20 mm. shorter than the fourth, but heavier than that vertebra. The neural spine more nearly resembles that of the same vertebra in recent forms being somewhat depressed posteriorly and broad superiorly. The anterior division of the transverse process is directed downward and forward extending somewhat in advance of the centrum, similar to that of the llama. The inferior keel is as prominent as that of the fourth cervical. The other characters are similar to those of the latter vertebra.

Sixth Cervical. — The sixth cervical is proportionally shorter than is that in the llama and retains the characters seen in that of *Poebrotherium*. The corresponding vertebra in the recent camel is remarkably similar in character while that of the llama is widely different. In *Oxydactylus* the centrum is 39 mm. shorter than that of the fifth, more strongly convex anteriorly, and somewhat more concave posteriorly than any of the preceding vertebræ. The inferior keel is well represented. The neural spine is high, similar to that of the camel and occupies the entire length of the superior border of the neural arch. In the llama the spine is represented by a low heavy ridge which is confluent with the postzygapophyses, while in *Oxydactylus longipes* and the recent camel the spine is entirely independent and extends to the posterior margin of the neural arch. The transverse process is like that of the llama, a thin plate of bone occupying a considerable portion of the side of the centrum. The inferior lamella, as in *Poebrotherium*¹⁰ and *Camelus bactrianus*, is not divided, while in the llama there is a distinct posterior and anterior division of this element. In the type, this lamella occupies the entire length of the inferior and exterior part of the centrum, pointing downward and outward; the anterior and posterior terminations are rounded tubercles connected by a thin and slightly emarginated plate of bone. The vertebrarterial canal is located in the pedicle as is that in the llama.

The Seventh Cervical. — The seventh cervical is approximately 30 mm. shorter than the sixth. The anterior face of the centrum is de-

¹⁰ *Journ. Morph.*, Vol. V, No. 1, p. 26.

cidedly hemispherical and the whole body of the centrum anteriorly has a decurved position resulting in a greatly curved keel. Posteriorly this vertebra is restored and the characters in this region are conjectural. The restored parts are indicated in the illustrations by broken lines. The anterior portion of the neural spine is preserved as it was found in position in the rock and indicates a high laterally compressed plate of bone similar to that of the recent camel and much unlike the low heavy spine of the llama. The anterior zygapophyses are greatly expanded, and the transverse processes are heavy and in general character resemble those of the living forms.

Cervical vertebræ are rare among the Loup Fork camel remains so far obtained, and some disappointment is therefore met with in a comparative study of them. When more complete material of the different genera and species are discovered we shall undoubtedly be able to determine whether or not the axis, as in *Camelus*, is the longest vertebra in the cervical series in any of the Loup Fork forms, or, if they all, as in the llama, had the third and fourth cervical the longest. On the whole, the structure in the cervical region of *O. longipes* is far more similar to that of the llama than to that of the recent camel. The strong downward curve of the posterior cervicals which brings the cranium more nearly on a level with the vertebral column in *Camelus* seems to have been less apparent in *O. longipes*. The latter genus probably carried the head higher than the former.

The Dorsals. — There are six dorsal vertebræ represented in the type specimen. Their relative positions as determined are the first, fifth, sixth, seventh, ninth, and tenth, assuming that there were twelve dorsals, which was the probable number.

The First Dorsal. — The centrum of the first dorsal is approximately 18 mm. shorter than that of the last cervical, and also less opisthocœlous. Inferiorly the centrum presents a faintly marked median keel with strong lateral ridges. Between the lateral ridges and the capitular facet is a deep pit or groove, which is also present on this vertebra in recent forms. The neural spine is high, laterally compressed, and comparatively broader than that in the camel and the llama. The prezygapophysis and the tubercular facet together form a heavy transverse process. The prezygapophyses are greatly expanded and are placed low down, giving a depressed appearance to the vertebra. The postzygapophysial facets of opposite sides are confluent. In the camel and the llama there is a decided groove separating the two facets.

Dorsals Two to Twelve. — As before stated, there is a break in the vertebral column of the type specimen, between dorsals one and five, three vertebræ being entirely absent. From other material (No. 562) it is evident that the second dorsal has a shorter centrum than the first, as in the camel, while in the llama the two are about equal. It appears that the median ridge on the inferior face of the centrum is well marked, but the pits referred to in describing the first dorsal are nearly obsolete. From the material at hand it is obvious that the spine is higher and narrower than that on the first dorsal, and that it increases in height until the fifth vertebra is reached, and in width until the sixth, which also seems to be true in the recent forms. The third and fourth vertebræ are apparently very similar to the second. The posterior part of the centrum of the fifth dorsal is present in the type and was found in position with the two succeeding vertebræ which were interlocked by their zygapophyses when found. The centra of these two vertebræ (sixth and seventh) are more laterally compressed, and somewhat higher proportionally than are those of the preceding dorsals. The neural canal is moderately large. The transverse processes are comparatively heavy, and the zygapophyses have that peculiar continuous articulation from side to side referred to in the description of the first dorsal. The ninth and tenth dorsals are complete including the neural spines and present characters similar to that of the sixth and seventh. The transverse processes on the ninth and tenth dorsals are greatly reduced. The neural spines are broad and thin. The spine on the tenth dorsal is slightly recurved superiorly, in anticipation of the erect spine of the anticlinal or twelfth vertebra. The postzygapophysis on the tenth dorsal has a small groove separating the articulating facets while the prezygapophyses of the ninth indicate a continuous facet. The eleventh and twelfth dorsals are missing in the type.

The Lumbar Vertebrae. — In the type of this genus the three anterior lumbar vertebrae are missing. The four vertebræ present were found interlocked by their zygapophyses and also attached to the sacrum. In skeleton No. 562 the first four lumbar vertebræ have their centra of equal length, while the centra of the following vertebræ become shorter, the last being the shortest, broadest, and most depressed in the series. The lumbar vertebrae present in the type show less development of the inferior keels than is shown in the recent camel and the llama, and differ from the latter genera by having strong lateral

ridges on either side of the median line or keel. The zygapophyses have the usual interlocking features, with evidence of the presence of episphenial processes, although not constant throughout the series. The neural spines have a greater forward slope than those of the recent genera. Posteriorly and near the base the spines send heavy laminae to each postzygapophysis, thus forming a deep triangular pit back of the base of the spines; a character which is almost entirely absent in the recent camel and the llama. A great similarity between *Oxydactylus longipes* and the recent forms is noticeable in the transverse processes. In the type specimen these are preserved in some instances for more than half their estimated length. The left transverse process on the last lumbar is complete and is proportionally flatter than in that of the recent genera, especially the camel, in which the corresponding process is more nearly circular in cross-section.

The Sacrum. — (Pl. VI, Fig. 8.) There are four firmly coössified centra in the sacrum of *Oxydactylus longipes*. This region of the vertebral column is proportionally somewhat lighter than in the recent forms, as will appear from the comparative measurements. The sacrum of *Oxydactylus longipes* is but very little longer, while the greatest lateral expansion is actually less than that of the llama. The first sacral is broad, nearly flat inferiorly, and sends out heavy pleurapophyses to meet the ilium, which is supported only by the first sacral vertebra. The neural spines, as in recent forms, are very light, the arches greatly depressed and thin, especially in the first and second sacrals. The last two sacrals have comparatively heavy rounded spines and the centra assume a cylindrical form more like those of the caudal vertebræ.

The Caudals. — In skeleton No. 562 there is preserved only a single fragment of a median caudal. Judging from the rapid tapering of the centra in the sacrum the tail was not longer than that of the camel, or may even have been shorter.

The Ribs. — There are in the type (No. 918) a number of rib fragments, including the first rib on one side nearly complete. The general form of the ribs resembles that of the recent species. The first rib is short, subcylindrical proximally, and considerably more flattened and expanded distally. The fragmentary remains of the ribs indicate that they were broad and rather thin in the anterior half of the thorax, while they become more rod-like posteriorly. The short distance between the head and the tubercles of the ribs would seem to indicate a rather small thorax. No sternal bones are known.

COMPARATIVE MEASUREMENTS OF THE VERTEBRAL COLUMN.

	<i>O. longipes</i>	<i>C. bactrianus.</i>	<i>L. huanaco.</i>
Greatest length of atlas.....	80 mm.	105 mm.	58 mm.
Greatest breadth of atlas.....	75 mm.	122 mm.	76 mm.
Length of atlas median line inferiorly.....	43 mm.	61 mm.	34 mm.
Greatest breadth of cotyle.....	55 mm.	105 mm.	52 mm.
Height of atlas posteriorly, including the inferior tubercle.....	42 mm.	75 mm.	44 mm.
Greatest length of axis.....	158 mm.	220 mm.	121 mm.
Length of centrum.....	138 mm.	180 mm.	102 mm.
Length of odontoid process.....	20 mm.	24 mm.	16 mm.
Greatest height of axis.....	65 mm.	104 mm.	60 mm.
Greatest width of centrum anteriorly.....	51 mm.	85 mm.	49 mm.
Greatest length of third cervical.....	195 mm.	190 mm.	124 mm.
Length of centrum of third cervical anteriorly...	174 mm.	165 mm.	110 mm.
Width of centrum of third cervical.....	26 mm.	44 mm.	26 mm.
Greatest length of fourth cervical.....	191 mm.	185 mm.	124 mm.
Length of centrum of fourth cervical.....	176 mm.	162 mm.	108 mm.
Width of centrum of fourth cervical anteriorly..	34 mm.	50 mm.	29 mm.
Greatest length of fifth cervical.....	169 mm.	183 mm.	119 mm.
Length of centrum of fifth cervical.....	150 mm.	158 mm.	100 mm.
Width of centrum of fifth cervical anteriorly....	34 mm.	55 mm.	31 mm.
Greatest length of the sixth cervical.....	135 mm.	175 mm.	102 mm.
Length of centrum of the sixth cervical.....	110 mm.	140 mm.	83 mm.
Width of centrum of the sixth cervical anteriorly	37 mm.	61 mm.	33 mm.
Greatest length of seventh cervical.....*	100 mm.	138 mm.	78 mm.
Length of centrum of seventh cervical.....	*77 mm.	115 mm.	59 mm.
Width of centrum of seventh cervical anteriorly	37 mm.	64 mm.	35 mm.
Greatest length of first dorsal.....	78 mm.	115 mm.	55 mm.
Length of centrum of first dorsal.....	55 mm.	79 mm.	39 mm.
Height including spine of first dorsal.....	125 mm.	215 mm.	105 mm.
Width across transverse processes of first dorsal..	87 mm.	125 mm.	73 mm.
Length of centrum of fourth lumbar.....	53 mm.	71 mm.	45 mm.
Length of centrum of fifth lumbar.....	50 mm.	71 mm.	44 mm.
Total length of centra of fourth, fifth, sixth and seventh lumbar.....	205 mm.	265 mm.	165 mm.
Greatest length of sacrum.....*	*142 mm.	211 mm.	130 mm.
Greatest width of sacrum.....	110 mm.	195 mm.	120 mm.
Greatest width at posterior end of sacrum.....	41 mm.	75 mm.	43 mm.

THE SCAPULA AND FORE LIMB. (Pl. VII, Fig. 1.)

The scapula is longer than in the llama. The neck is longer and more constricted. The coracoid is proportionally less prominent, and the spine overhangs the postscapular fossa more than it does in the llama. In the type the spine begins 35 mm. above the glenoid cavity

and extends in a curved line nearly to the superior border, dividing the blade into a greater post- and lesser pre-scapula. Superiorly the scapula is comparatively much broader than that of the camel, which has a long and slender scapula with the pre- and post-scapulæ more nearly equal. The acromion is broad.

The Humerus. — (Pl. VII, Figs. 2 and 3.) With the exception of the tuberosity, the humerus of the cotype (No. 886) of this genus is well preserved. Other material in the museum collections supplement this and the humerus agrees in its chief characters with Cope's description of that in *Procamelus occidentalis*.¹¹ Of the latter Cope says, "The humerus is rather slender, and is characterized by the large size of the tuberosities. They are connected at their bases, the connecting mass enclosing a deep fossa with the head, or condyle. The greater tuberosity is produced much beyond the head proximally, but not much beyond the line of the anterior border of the shaft." In the cotype the head is comparatively as large as that of the llama, and fully as convex. From material at hand it appears that the bicapital groove is so situated that in a direct front view it appears on one side while that of the camel and the llama is exactly in front. The deltoid ridge and hook, as well as the supinator ridge, is fully as well developed as in the recent forms. The distal end of the humerus is proportionally narrow, and as in *Poebrotherium* the trochlea is more oblique to the long axis of the shaft and extends higher up on the bone posteriorly than it does in the llama. In *Camelus* this character is more nearly like that in *O. longipes*. The internal epicondyle has a greater development in *O. longipes* than in the recent forms. The external epicondyle is less developed and is more like that of the recent camels. The anconeal fossa is narrow and high. There is no evidence of a supratrochlear foramen. The appearance of the humerus aside from the greater development of the tuberosities, compares closely with that of the llama. The deltoid crest is turned backward. The bone is light, in harmony with the slender proportions of the limb.

The Ulna and Radius. — (Pl. VIII, Fig. 1.) There is preserved in the type only the proximal end of the ulna and radius. The cotype (No. 886) has both bones present. The two bones are as completely coössified as in the recent forms. The shaft is as straight as that of the camel and less curved than that of the llama. The head

¹¹ "U. S. Geogr. S.," Part II, Vol. IV, p. 533, 1877.

of the radius is narrow. The external articular facet for the humerus is much larger than the internal, and, as in recent genera, it is not continuous with the superior border of the sigmoid notch. The internal facet passes upward without interruption to the summit of the superior process. The two facets are concave and are divided by a rounded ridge which also extends uninterruptedly to the upper extremity of the sigmoid notch. The olecranon process is moderately long, comparatively light, and much compressed laterally, and is directed backwards and upwards from the sigmoid notch. In having the groove on the anterior face well developed for the extensor tendon *Oxydactylus* differs entirely from the recent camel and the llama. *Poebrotherium* has also this groove well developed. The truncated superior end of the olecranon process of *Oxydactylus longipes* is comparatively lighter than that of the recent genera. The proximal half of the ulnar shaft is concealed by the radius when viewed from the front. Midway the shaft of the ulna appears on the external side of the radius and forms a sharp ridge thus broadening the shaft composed of the combined radius and ulna which is decidedly wider distally than proximally. In the skeleton of *Lama huanaco*, here used for comparison, the ulna like that of the camel has a more external position throughout the entire length of the radial shaft. This may be due to individual variation, since Scott says that the ulna in the llama is almost entirely posterior in position.¹² In the type the bicipital tuberosity is small as in *Poebrotherium* and occupies the internal border immediately below the head as in the recent forms. Distally there are three distinct facets which are more nearly equal in width than in the recent camel and the llama. The median and external facets are proportionally wider than in the latter genera. The three facets are more oblique to the transverse axis of the shaft than they are in the llama. The scaphoid articulation is concave anteriorly where it is more elevated than the convex posterior part, which is carried high up on the posterior face of the radius, conditions similar to those seen in the recent genera. The lunar articulation is wider anteriorly than posteriorly and presents a subtriangular facet, which is well separated from the scaphoid and cuneiform facets by high ridges. Like the scaphoid the lunar facet is concave in front and convex behind, and is reflected on the posterior face of the radius but in a lesser degree. The cuneiform facet is proportionally narrower than in the llama, and

¹² *Journ. Morph.*, Vol. V, No. 1, p. 32, 1891.

as in the latter it is saddle-shaped, convex antero-posteriorly and concave laterally. The pisiform articulation on the shaft is almost continuous with the cuneiform facet and is placed as high as the upper margin of the posterior scaphoid facet. The inner angle of the radius is as well developed in *O. longipes* as in the llama.

The Scaphoid. — The scaphoid (No. 886) is proportionally smaller than in the llama, but resembles it in its general characters. In the cotype this bone is narrow transversely and deep antero-posteriorly. The anterior part of the proximal articulation is a broad convex ridge, and the posterior part is concave and terminates in an elevated, sharp, hook-like border. The inner side is rounded and rugose, the external ulnar surface is a vertical plane with three distinct facets for the lunar, which are as well developed as those of the llama, the anterior facet near the distal end being the smallest of the three. Between the last mentioned facet and the posterior rounded facet, there is a deep triangular pit, with its broad exit directed downward. Distally the scaphoid has two facets, for the trapezoid and the magnum. The first mentioned is a rounded concavity on the postero-radial part of the bone and the magnum facet is flat and occupies the entire anterior face.

The Lunar. — The lunar (No. 886) is proportionately greater in size than is that of the llama and the camel. The wedge or beak extends below both scaphoid and cuneiform when in position in the carpus. The bone is as broad as the scaphoid and higher. Its antero-posterior diameter is nearly as great as that of the scaphoid. This is chiefly due to the long, heavy, posterior arm, which greatly exceeds that of the llama in size. The proximal articulation is irregularly convex fore and aft and somewhat triangular in shape. The radial side has three facets corresponding to those of the scaphoid with which it articulates. On the radial and ulnar sides the lunar is deeply excavated and the bone has an elongated vertical appearance, especially when seen from in front.

There are two posterior processes, the shorter projects outwards and downwards on the ulnar side, abutting against the cuneiform and unciform, the longer process extends posteriorly, slightly radially and has a beak-like decurved tubercle which forms the apex of the facet for the magnum. Distally the unciform and magnum facet are equal in size and meet nearly at right angles, thus forming a wedge-shaped beak, which is longer than is that in the llama and the camel.

The Cuneiform. — As in *Poebrotherium* the cuneiform in the co-type (No. 886) is high, narrow and deep, not nearly so massive as that of the llama and has a greater concavity on the proximal articular facet for the ulna than it has in the latter genus. The convex posterior facet for the pisiform extends somewhat farther forwards, especially on the radial side of the bone, thus giving a shorter oblique facet for the distal end of the ulna than is seen in the llama. The radial side is deeply excavated and has two facets, one superior and one inferior, the latter much less deeply excavated than is that of the llama, which fact is due to the lesser angularity of the posterior bifid projection of the lunar in *O. longipes*. The external or ulnar face of the cuneiform is rounded and rugose. Distally there is a single facet, concave antero-posteriorly, for articulation with the unciform.

The Pisiform. — The pisiform (No. 886) is shorter and comparatively heavier than that of the llama. The cuneiform facet has a more rounded face and equals the ulnar facet in size, while in the llama the latter is somewhat larger. The free end of the bone is thicker and more rugose, although not attaining the vertical depth which is seen in the recent genera. The neck of the pisiform is more constricted in *O. longipes* than in the llama.

The Trapezoid. — The trapezoid (No. 886) is a rounded nodular bone and is proportionally not so deep as in the llama. The proximal articular surface for the scaphoid is rounded much in the same manner as in the recent genera. On the radial side the magnum facet is divided, the inferior part being the larger, while in the llama the superior part is the larger of the two. The ulnar face is very rugose and rounded and the postero-internal face carries an irregularly quadrilateral facet extending from the distal margin half way up the total height of the bone and articulating with the rudimentary trapezium. Distally there is one flat facet similar to that of the camel and the llama.

The Trapezium. — The trapezium is a small oblong nodule greatly resembling a sesamoid. There are two facets on the trapezium, one antero-superior which is flat and articulates with the corresponding facet on the trapezoid; the other facet is antero-inferior, slightly concave, ovate in shape and articulates with the adhering scale-like second metacarpal.

The Magnum. — The magnum (No. 918) is proportionally longer antero-posteriorly than in the llama and has a greater constriction in front of the posterior hook and rather resembles that bone of the re-

cent camel. Proximally the magnum articulates with the lunar and scaphoid. The facet for the former is regularly convex and meets the concave lunar facet. The latter is flat and irregularly triangular in outline. The cavity for the trapezoid is nearly rectangular and it more nearly resembles that of the camel than the llama. In the latter genus the cavity for the trapezoid is a very oblique opening, with walls slanting upwards and inwards. The ulnar side is excavated and has two facets, one anterior and one posterior, both articulating with the unciform. The anterior facet is continuous with the lunar facet, which is situated above, without a distinct dividing ridge, as is seen in the llama and the recent camel. The posterior facet is located on the free end of the tubercle on its posterior-ulnar side. Distally the magnum has one single broad triangular and flat articulation, somewhat recurved posteriorly, forming a blunt beak for articulation with metacarpal three.

The Unciform. — The unciform in the type (No. 918) is narrow and long. The great development of the posterior decurved hook-like process greatly increases the length of the bone. Proximally the unciform has two facets, the lunar and the cuneiform, which are divided by a high sinuous ridge. The lunar facet is the larger and is deeper than is that of the llama. The cuneiform facet is long, narrow and irregularly curved. There are three facets on the radial side of the unciform, the two superior facets articulate with the magnum, and the inferior facet meets the external side of the proximal end of the third metacarpal. The deeply excavated pit which appears in front of the tubercle on the radial side in *O. longipes* is represented only by a slight cavity in the llama. In the camel this cavity is somewhat deeper but not so deep as in *O. longipes*. Externally the unciform is rounded and rugose. The distal articulation for metacarpal IV is slightly concave and occupies the entire distal surface of the bone. The unciform of *O. longipes* more nearly resembles that of the recent camel than that of the llama. The greatly developed posterior hook on the unciform in *Oxydactylus* is generally characteristic of the Loup Fork camels.

The Metacarpals. — (Pl. VIII, Figs. 2 and 3.) On the sides of the functional third and fourth metacarpals of (No. 886) there are small, flat, rugose ossicles, representing metacarpals II and V. Metacarpals III and IV are entirely separated and proportionally more elongated than in the recent genera. The upper two thirds of the shaft is laterally much compressed. The distal portion is D-shaped in cross-section.

tion. The two bones are closely applied to each other with roughened surfaces throughout nearly their entire length. Distally they are slightly separated. Metacarpal III is proportionally heavier than that of the llama. Proximally the head rises above that of metacarpal IV, and carries four facets for articulation with the unciform, magnum, trapezoid and trapezium, respectively. The magnum facet is slightly concave and occupies the anterior face, while the posterior facet for the trapezoid is more elevated and extends downward on the posterior face of the bone. The decurved part of the latter facet, although without a distinct separation from that for the trapezoid, serves to articulate with the ovate-shaped facet referred to as present on the trapezium. On the ulnar side, near the anterior face, there is a process with a rounded articular face, which abuts against a corresponding facet on the unciform. Immediately below this process is the articulation for metacarpal IV. The radial face of metacarpal III is comparatively flat and broad, the anterior narrow and very convex. The ulnar face is flat, rough, and is closely applied to metacarpal IV. Posteriorly the two metacarpals have prominent lateral ridges, thus forming a wide, deep groove in the median line, which extends from the proximal end down the shaft two thirds of its length. The lateral posterior ridge is much more pronounced on metacarpal III than metacarpal IV. In the recent camel and llama the posterior ridges on the metacarpals are more nearly equal in size and the median depression is comparatively shallow. Half way down on the shafts of the metacarpals of *O. longipes* the cross-sections gradually take on a D-shaped form which is continued to the distal trochlea. In the early forms referred to the Tylopoda the distal trochlea is very narrow, a character which is retained in *O. longipes*, the trochlea being scarcely any wider than the shaft of the bone. In the recent camel and llama the trochlea is wide, but the carina is much stronger in *O. longipes* than in these genera. Metacarpal IV is lighter, slightly shorter and more angular in cross-section near the proximal end than metacarpal III. The proximal end has a single articular facet for the unciform. Another small facet is seen on the antero-radial side for articulation with metacarpal III. The shaft has less depth antero-posteriorly than that of the third metacarpal. The size of the distal end, including the trochlea, is more nearly equal to that of metacarpal III than is the proximal end of the bone, and the phalanges of the two digits are about equal in size.

The Phalanges. — The phalanges of the type (No. 918) are proportionally shorter than they are in the recent camel and llama, and are less symmetrical. The proximal ends of the first row of phalanges have the concave articulations for the metapodials much deeper than those of the llama and the recent camel. The grooves for the metapodial keels are deep and there is a nodular tuberosity on either side of the groove on each phalanx which is well illustrated in Pl. VIII, Fig. 3. In the camel and the llama the metapodial groove is shallow and the rugosity for the attachment of the pad extends well forward. Distally the trochlea is deeper and more oblique than in the recent camels, and external keels do not extend as high up on the posterior face of the shaft. The phalanges of the second row have a decided ridge separating the articular facets articulating with the proximal phalanx. This ridge is obsolete in the recent genera. As in *Poebrotherium* the second row of phalanges are proportionally longer than in the recent Tylopoda. The phalanges of the first and second row in *O. longipes* do not seem to have changed any in character from those of *Poebrotherium*.¹³ Cope says that "the phalanges (in *Procamelus occidentalis*)"¹⁴ only differ from those of the llama in the greater prominence of the proximal ligamentous insertions and the rather more slender shafts." If the illustration is correct in Plate LXXIV in the publication just referred to, it is obvious that the proximal phalanx in *P. occidentalis* is like that of *O. longipes* and without the plantar rugosity for the attachment of the pad. The comparative length of the bone, however, is more like that of the llama than is the corresponding bone in *O. longipes*.

The Unguals. — The ungual phalanges in *O. longipes* are comparatively short, laterally compressed, pointed and high; they have not changed in shape from those of *Poebrotherium* while in comparative length there seems to be considerable difference, the former genus having the unguals more reduced than the latter. The phalanges in *O. longipes*, as a whole, seem to retain characters seen in the early Oligocene forms, while other Loup Fork genera¹⁵ have unmistakably taken on these tylopod characters, such as the rugosity on the plantar face for the pad and the general flattening of the median phalanx.

¹³ *Journ. Morph.*, Vol. V, No. 1, p. 37, 1891.

¹⁴ "U. S. Geogr. S.," Vol. IV, Part II, p. 337, 1877.

¹⁵ Specimens in the American Museum studied by the writer.

COMPARATIVE MEASUREMENTS OF FORE LIMBS AND FEET.

Mark in front of figures denotes comparative measurement made with other individuals of same species.

	<i>O. longipes.</i>	<i>C. bactrianus.</i>	<i>L. huanaco.</i>
Greatest length of scapula	288 mm.	477 mm.	225 mm.
Greatest width of scapula.....	190 mm.	235 mm.	155 mm.
Width of neck of scapula.....	42 mm.	77 mm.	41 mm.
Width of humeral articulation including coracoid process of scapula.....	65 mm.	106 mm.	55 mm.
Width of prescapula ¹⁶	65 mm.	90 mm.	86 mm.
Width of postscapula	100 mm.	127 mm.	48 mm.
Greatest height of spine.....	34 mm.	50 mm.	28 mm.
Greatest length of humerus.....	*315 mm. ¹	380 mm.	287 mm.
Greatest length of radius and ulna	*440 mm.	462 mm.	347 mm.
Width of radius at the head.....	47 mm.	87 mm.	47 mm.
Width of shaft below the head	35 mm.	71 mm.	35 mm.
Height of carpus.....	*38 mm.	65 mm.	35 mm.
Width of carpus	*50 mm.	91 mm.	43 mm.
Greatest transverse diameter of unciform.....	25 mm.	36 mm.	21 mm.
Height of unciform.....	17 mm.	28 mm.	15 mm.
Antero-posterior diameter of unciform.....	40 mm.	53 mm.	28 mm.
Antero-posterior diameter of magnum.....	28 mm.	33 mm.	24 mm.
Greatest breadth of magnum.....	22 mm.	40 mm.	20 mm.
Height of magnum	16 mm.	19 mm.	12 mm.
Length of metacarpals.....	345 mm.	330 mm.	230 mm.
Breadth of distal end of metacarpal 3.....	23 mm.	45 mm.	23 mm.
Breadth of distal end of metacarpal 4.....	23 mm.	45 mm.	23 mm.
Length of proximal phalanx.....	66 mm.	100 mm.	77 mm.
Length of median phalanx.....	31 mm.	65 mm.	27 mm.

THE PELVIS AND HIND LIMB.

The Pelvis. — (Pl. IX, Figs. 1 and 2.) The general appearance of the pelvis is strikingly different from that of any of the living camels. It is depressed, greatly elongated, and but little expanded, being especially narrow posteriorly. In the camel and the llama the pelvis is short and much expanded and when in position the longer axis is inclined at a higher angle than in *O. longipes*. In the type (No. 918), the most important parts of the pelvis are preserved and they present the characters which we proceed to describe. The antero-superior border of the ilium is not entirely complete but indicates

¹⁶Measurements taken of type 60 mm. below the suprascapular border where the bone is complete. Measurements of the other genera are taken in a corresponding manner.

the greatly expanded condition of the ilium in this region. The constriction back of the surface for contact with the sacrum is similar to that in the llama. The peduncle is comparatively long, and the acetabulum is deep. The ilium, ischium, and pubis unite to form the acetabulum in much the same manner as in recent forms. The superior border of the ischium is high, sharp, and as in the llama, has many small ridges for muscular attachments running from the superior margin across the entire external surface. The posterior portion of the ischium is wanting. The pubis is proportionally short and stout. The shaft is more circular in cross-section than is that of the recent forms. The distal end is narrow, long and thick, instead of broad and short as in living forms. The thyroid foramen is large and ovate in shape. The elongate and narrow pelvis of *O. longipes* contrasts strongly with the broad and shorter pelvis of the recent species as will appear from the following measurements of these elements in *Oxydactylus longipes* and *Lama huanaco*. In the former the width across the pelvis at the acetabular region is 135 mm. while that of the latter is 165 mm., a difference which seems all the more marked when we consider that *O. longipes* is on the whole the larger animal of the two.

The Femur. — (Pl. IX, Fig. 3.) The femur has a comparatively slender sinuous shaft, subcircular in cross-section, greatly expanded both proximally and distally and in general appearance resembling that of the llama. The head is smaller, the ovate pit for the *ligamentum teres* shallower, but its position is the same as in the recent genera. The head is separated from the shaft by a longer and more constricted neck than in the llama and camel. The great trochanter is higher, not so heavy superiorly, and has not as great an obliquity to the long axis of the bone as in the llama. The bridge from the head to the greater tuberosity being rather short, the digital fossa is accordingly narrow laterally, though fully as deep as is that of the llama. The lesser trochanter is a prominent knob unlike the sharp rugose ridge seen in the llama and decidedly more prominent than is that of the camel. At the base of the lesser trochanter there begins a prominent ridge for muscular attachment which continues downward on the posterior face of the bone. The same ridge is found in the llama and the camel. The rotular trochlea as well as the condyles are comparatively narrow, the external condyle being the larger of the two. The intercondylar notch is narrower than in the llama.

The Patella. — There is no patella with the type, but it is present in another skeleton (No. 562), where it is thinner, broader, and much shorter than is that of the llama. The superior border is the broadest and the outline is that of a long triangle with the apex directed downward.

The Tibia. — The tibia in *O. longipes* is longer than the femur, while in the camel the femur is much the longer bone of the two. In the llama the two bones are of equal length. In *Poëbrotherium* the tibia is apparently longer than the femur. The shaft is long, slender and straight, the lower half being suboval in cross-section. Proximally there is a great expansion equaling that in the llama. The articulations for the femoral condyles are broad laterally, slightly convex antero-posteriorly, and, as in the llama, the external facet is the larger, and is separated from the internal by the bifid spine. The cnemial crest is comparatively heavier and extends lower down on the shaft than does that of the llama and the camel. Distally the external facet for the astragalus is proportionally wider, and the internal narrower than that of the llama, resembling that of the camel more closely in this respect. In the latter the internal malleolus is placed anteriorly and in such a way as to present a constriction on the anterior half on the internal facet, similar to that found in *O. longipes*. In the llama the external facet is entirely without this constriction. The fibular facet is comparatively smaller than in the llama. This is especially true of that portion anterior to the groove which divides this facet. In the type of *O. longipes* the external astragalar facet has a pit which is comparatively smaller than that of the camel.

The Fibula. — The fibula, as in modern representatives of the Camelidæ, is reduced to the malleolus which articulates with the tibia, astragalus and calcaneum. The rudimentary process of the shaft is proportionally heavier than in the recent genera. It is triangular in cross-section, terminates in a sharp point superiorly, and fits closely into the deep groove on the external face of the tibia.

The Tarsus. — The tarsus of *Oxydactylus longipes*, as compared with that of the camel and llama, is higher and much narrower, as would be expected from the lighter structure of the entire limb already noticed. The calcaneum is much longer, but of less diameter antero-posteriorly than is that of the llama. The free truncated end of the tuber shows characters similar to those of the recent genera. The fibular facet is less prominent and is placed at a greater obliquity to

the long axis of the calcaneum than in the camel, and is more nearly like that of the llama. The facet for the cuboid is somewhat longer antero-posteriorly than in the llama but the inferior projecting articular lip, which embraces the distal end of the astragalus in the camel and the llama is entirely absent in *Oxydactylus longipes*. There are no important differences from that of living genera in the sustentacular facet. Below the latter facet and above that of the cuboid is an opening, but not nearly so distinct as is seen in living forms. The groove on the posterior face immediately above the cuboid facet is deeper than that in the llama and resembles that of the camel.

The Astragalus.—The astragalus is comparatively much longer and narrower than that of the camel and llama. Anteriorly there is more of a constriction and a greater separation between the proximal and distal trochlea than in the recent genera. The internal condyle is not nearly so heavy as that of the llama, except at the posterior apex, where it has a slightly recurved shoulder not observed in the camel or the llama. The articulation is continuous without the interruption observed on the lateral side of the condyle of the camel. In the llama this articulation is also uninterrupted. The external condyle is comparatively lower in *O. longipes* than in the camel giving the bone a more symmetrical appearance than in the latter genus. The distal trochlea is similar to that of the camel and the llama, with the postero-internal portion of the navicular facet somewhat more extended inwardly than in the latter genus.

The Cuboid. — (Pl. IX, Fig. 5.) The cuboid is comparatively larger in the antero-posterior direction and somewhat higher than that of the camel and the llama. The calcaneal facet is long and narrow. The astragalar facet is narrow, especially posteriorly, where the calcaneum takes up the entire width of the bone, forcing the conical apex of the astragalar facet far inward, unlike that of the recent forms. The facets on the tibial side are as distinct as in the living representatives. There is a deep narrow groove immediately below the calcaneal facet on the posterior face extending clear across the bone, and differing in this respect from the llama. The posterior hook is comparatively heavy and extends outwards and downwards, fitting against the palmar process of the fourth metatarsal. The smaller portion of this bifid hook is superiorly located and is a conical projection on the tibial side with a small facet for articulation with the navicular, the distal facet supporting the fourth metatarsal is irregularly triangular in

shape with a small pit on the emarginate tibial side, similar to that of the llama.

The Navicular. — The navicular is more nearly like that of the recent Tylopoda than any bone in the tarsus. The astragalar facet is concave antero-posteriorly, with an emarginated fossa in the middle of the bone on the fibular side. On the tibial side is another smaller emargination with a small pit; and below the pit, is a small tubercle, which extends to the distal face and takes up a large portion of the tibial face of the bone. In the llama this tubercle is almost obsolete, while the camel has it better developed. The postero-inferior rounded facet for the cuboid is as prominent as in the camel and llama. Distally there are two facets, the *ecto-meso*¹⁷ and the ento-cuneiform, the two former are divided only by a low ridge, while the latter is separated, and placed somewhat higher on the posterior portion of the bone and is slightly convex.

The Ecto-meso-cuneiform. — The united ecto-meso-cuneiforms are comparatively much smaller, especially antero-posteriorly, than in the recent forms. Proximally two facets are indicated by a shallow groove, while the distal articulation is more continuous and more similar to that of the llama. There is only one facet for the cuboid, the antero-fibular, near the proximal end. The prominent tubercle with the rounded facet at the free end on the fibular side which abuts against the cuboid in *Camelus* is entirely absent in *O. longipes* and the llama.

The Ento-cuneiform. — The ento-cuneiform is an irregularly shaped sesamoid with a proximal, concave facet for the navicular. Near the proximal end on the anterior face is a rounded pit for articulation with the slightly projecting tubercle on the posterior face of the united ecto-meso-cuneiform.

Near the distal end posteriorly, there is a strong hook-like process with a large facet slightly convex in all directions, which articulates with the plantar process on metatarsal IV. In the llama this facet is entirely absent though the tubercle is still present in a rudimentary form. The plantar processes have become more depressed in the llama and the tubercle on the ento-cuneiform is entirely free. Distally and on the fibular side is a fourth facet for the second rudimentary metatarsal.

¹⁷ Scott states that the ecto- and meso-cuneiforms are coalesced in *Poebrotherium*. *Journ. Morph.*, Vol. V, No. 1, p. 42.

The Metatarsals.—One of the chief distinctive characters of *O. longipes* is the fact that the lateral metatarsals II and V are a little less reduced than is ordinarily the case in the Loup Fork camels. As in *Poebrotherium*¹⁸ metatarsal II has “an enlarged head” with an independent articulation, which in *O. longipes* is comparatively higher than in the llama. The bone is firmly coössified with metatarsal III and is supported by the entocuneiform. Metatarsal V, on the other hand is entirely separated proximally from metatarsal IV and articulates with that bone by a small rounded facet near the proximal end, but is not in touch with the cuboid. At the base of the palmar process of metatarsal IV, the two bones IV and V are fused leaving a peculiar ovate-shaped foramen seen in Pl. X, Fig. 4. The functional metatarsals III and IV are a trifle lighter than the metacarpals, but are of nearly the same length, thus resembling very closely the typical Tylopoda. According to Prof. Scott, *Poebrotherium* stands farther removed, having the metatarsals longer and broader than the metacarpals.

Metatarsal III is only a very little heavier than metatarsal IV, and the lateral metatarsal II, as above stated, distinctly forms a part of the functional metatarsal, as in the recent genera. Metatarsal III has two facets on the proximal end. The anterior is concave and articulates with the compound ecto-meso-cuneiform, while the posterior facet is situated on the palmar process and is a wide shallow pit for the reception of the peculiar convex facet on the ento-cuneiform. The hook-like palmar processes on metatarsals III and IV have become coössified. These are the only parts of the two bones showing any true coalescence and this is a constant character shown in all specimens of *O. longipes* in the collection of the Carnegie Museum. Metatarsal IV is lighter than metatarsal III, and they are closely applied to each other with the opposed surfaces slightly rugose and extending to within 30 mm. of these distal ends. The shafts have a slight curvature with the midshaft turned backward. Laterally the shafts are nearly straight and but little separated distally. Metatarsal IV has two proximal facets which articulate with the cuboid. The anterior articulates with the corresponding facet on the anterior half of the cuboid. The posterior is on the palmar process opposite the facet on the process of metatarsal III. On the tibial side near the anterior face is a small facet for articulation with metatarsal III. Distally, as in the meta-

¹⁸ *Journ. Morph.*, Vol. V, Part 1, p. 42, 1891.

tarsals, the carina is comparatively strong and is confined principally to the plantar side.

Phalanges.—The proximal phalanges of the hind feet are proportionally longer than in the llama, and exhibit a repetition of the characters shown in the fore feet.

COMPARATIVE MEASUREMENTS OF THE PELVIS, HIND LIMB AND FOOT.

	<i>O. longipes.</i>	<i>C. bactrianus.</i>	<i>L. huanaco.</i>
Greatest length of pelvis	300 mm. ¹⁹	420 mm.	262 mm.
Greatest width of superior border of ilium.....	158 mm. ¹⁹	300 mm.	155 mm.
Length of ilium from anterior border of acetabulum to superior border.....	165 mm. ¹⁹	255 mm.	168 mm.
Length of ischium from posterior border of acetabulum to ischial tuberosity.....	115 mm. ¹⁹	125 mm.	105 mm.
Length of pubic symphysis.....	110 mm.	138 mm.	
Greatest length of femur.....	382 mm.	495 mm.	320 mm.
Transverse diameter of proximal end of the femur.	79 mm.	135 mm.	75 mm.
Transverse diameter of distal end of femur.....	67 mm.	115 mm.	63 mm.
Diameter of shaft of femur in the middle	30 mm.	45 mm.	28 mm.
Greatest length of tibia.....	431 mm.	440 mm.	320 mm.
Transverse diameter of proximal end of tibia....	70 mm.	117 mm.	70 mm.
Greatest expansion of proximal end of tibia antero-posteriorly.....	84 mm.	106 mm.	67 mm.
Transverse diameter of distal end of tibia.....	51 mm.	85 mm.	46 mm.
Greatest length of calcaneum.....	115 mm.	135 mm.	85 mm.
Length of tuberosity above sustentacular facet...	72 mm.	87 mm.	52 mm.
Distance from tibular facet to distal end.....	42 mm.	56 mm.	33 mm.
Breadth of calcaneum at sustentacular facet.....	37 mm.	55 mm.	30 mm.
Antero-posterior diameter of tuberosity above sustentacular facet.....	35 mm.	55 mm.	30 mm.
Total height of tarsus from proximal end of astragalus to distal end of cuneiform.....	73 mm.	108 mm.	64 mm.
Greatest height of astragalus.....	55 mm.	74 mm.	45 mm.
Greatest breadth of astragalus.....	36 mm.	50 mm.	30 mm.
Greatest height of navicular.....	25 mm.	17 mm.	9 mm.
Greatest height of cuneiform.....	14 mm.	17 mm.	10 mm.
Greatest length of metatarsals.....	355 mm.	347 mm.	237 mm.
Greatest length of proximal phalanx.....	61 mm.	88 mm.	68 mm.
Greatest length of second phalanx.....	33 mm.	61 mm.	35 mm.
Greatest length of ungual phalanx.....	28 mm.	28 mm.	20 mm.

¹⁹ Indicates that measurements have been estimated by comparison with other individuals.

THE MOUNTED SKELETON.

Plate XV is from a drawing of the mounted skeleton. The type of *O. longipes* was used as the basis of this mount and the missing parts were substituted from other individuals of about the same size and pertaining to the same species. A few bones not represented in the collections were restored in plaster and accurate records were kept of all substituted parts. In the skeleton the restored parts are indicated by a red +, and while of the same general color as the actual bones, the shade differs sufficiently for them to be easily recognized. Each substituted bone used in the mount bears its departmental number, thus effecting a complete and permanent record as to the association of all the bones used in the construction of the composite skeleton.

The skeleton was mounted by the writer in such a manner that any bone may be readily detached from the whole.

The pose is intended to represent the animal when walking slowly on the level ground, with the head only moderately elevated.

The mounted skeleton presents many peculiarities which would be lost to the observer if seen in a disarticulated state. The small cranium, elevated above the main axis of the dorsal region, the small thoracic cavity, the narrow pelvis and the greatly elongated limbs and cervical region are characters which are fully appreciated only in the mounted skeleton. The skeleton as a whole resembles more closely that of the llama than the camel. The elevated position of the head, the curvature of the back, and the general shape of the limbs is especially like that of the llama, while the dental formula, the small and elongated cranium, the separated metapodials, the unguligrade characters of the phalanges and the extremely narrow pelvis are features readily distinguishable from either of the recent forms.

MEASUREMENTS.

Total length of skeleton from apex of premaxillary to posterior end of ischium.....	212 cm.
Total height from toes to top of anterior dorsal spines.....	130 cm.
Length of cervical region.....	86 cm.
Length of dorsal region.....	60 cm.
Length of lumbar region.....	48 cm.
Length of sacral region.....	11 cm.

Oxydactylus brachyodontus sp. nov.

The type (No. 664) (Pl. XI, Figs. 1, 2 and 3) of the above named species is represented by a fairly complete cranium with the lower jaw in position and the atlas, anterior portion of the axis and the succeeding five cervicals, the distal end of both humeri, both ulnæ and radii, the carpals, metacarpals and phalanges, the left femur, the tibia, calcaneum, astragalus, cuboid and metatarsals. There is another nearly complete skeleton (No. 562) which I have provisionally referred to this species; but unfortunately no part of the skull or lower jaw is present. The two individuals do not differ greatly in size, No. 562 being only a little larger than No. 664. The principal differences between this species and *O. longipes* are as follows:

The Cranium. — In comparison with that of *O. longipes* the cranium is relatively large. The second and third incisors are present and part of the alveolus for the first. The third incisor is smaller than the canine. The first premolar which is somewhat reduced, is subconical and has a single root. Premolars two, three and four are similar to those of *O. longipes*. The molars are brachyodont, broad and comparatively short antero-posteriorly. The outline of the skull is similar to that of *O. longipes*. The fronto-nasal suture is perhaps placed a little farther back than in the latter species.

The Mandible. — The lower jaws present characters very like those of *Protomeryx* (*Gomphotherium*) *cameloides*,²⁰ agreeing especially in the absence of a diastema between the incisors and canine. In *O. brachyodontus* the incisors are more reduced than in *Protomeryx cameloides*, but have the same spatulate shape. In the type of *O. brachyodontus* the teeth are much worn (Pl. XI, Fig. 4). The first premolar is fixed by two strong roots, and, as in the upper jaw, the crown is subconical with the greater diameter directed antero-posteriorly. In *Protomeryx cameloides* this tooth has a greater antero-posterior diameter and has quite distinct anterior and posterior basal tubercles. In the type *O. brachyodontus* the second, third and fourth premolars do not differ materially from those of *O. longipes*. The true molars differ from those of *O. longipes* by being proportionally broader and shorter.

The Cervicals. — (Pl. XII, Figs. 1, 2, 3 and 4.) The cervicals are comparatively short and heavy. The axis and the third cervical

²⁰ *Bul. Am. Mus. Nat. Hist.*, p. 118, 1898.

of No. 562 differ from those of *O. longipes*. The spines are heavier and higher than in that genus. On the axis the spine slopes forward at a greater angle and extends farther backward than does that in *O. longipes*. The length of the axis and the third cervical is more nearly equal than in *O. longipes* and the inferior keels are stronger. The fifth cervical vertebra of the type, No. 664, has a distinctly higher and heavier spine (Pl. XII, Fig. 4), than the corresponding vertebra of *O. longipes*, otherwise it is similar to that of the latter species though somewhat smaller.

MEASUREMENTS OF SKULL AND VERTEBRÆ.

Length of cranium from incisor 3 to external auditory meatus	268 mm.
Total length of dental series from incisor 3 to and including molar 3.....	165 mm.
Distance from incisor 3 to pm. 2.....	64 mm.
Length of continuous molar-premolar series ..	93 mm.
Total length of premolars 2 to 4.....	37 mm.
Total length of molar series	56 mm.
Greatest length of nasals	110 mm.
Greatest length of mandible	255 mm.
Greatest height including coronoid process.....	138 mm.
Height of coronoid.....	44 mm.
Depth of ramus back of molar 3	45 mm.
Depth of ramus at diastema in front of pm. 2.....	22 mm.
Distance from canine to pm. 2	45 mm.
Length of continuous molar premolar series	100 mm.
Length of premolars 2 to 4	36 mm.
Length of molar series.....	65 mm.
Greatest length of atlas approximately	75 mm.
Greatest width of atlas approximately	75 mm.
Greatest width of cotylus.....	55 mm.
Greatest length of cervical 3.....	130 mm.
Length of centrum of cervical 3.....	118 mm.
Greatest length of cervical 4.....	126 mm.
Length of centrum of cervical 4.....	112 mm.
Greatest length of cervical 5.....	124 mm.
Length of centrum of cervical 5 approximately	100 mm.
Greatest length of cervical 6.....	106 mm.
Length of centrum of cervical 6	86 mm.

The Fore Limb and Foot. — (Pl. XIII.) The limbs of *O. brachyodontus* (No. 664) are elongated and rather lighter in comparison with the cranium, than in *O. longipes*. The internal epicondyle of the humerus is of greater development and the curvature of the ulno-radial shaft is more pronounced in *O. brachyodontus* than in *O. longi-*

pes. The carpal series presents no important difference from that of *O. longipes*. The metacarpals are long, slender, and distally spread more distinctly than in *O. longipes*. As in the latter species the carina is strong and located entirely on the plantar face of the bone. The phalanges have no rugose surface on their plantar sides for the attachment of pads. The unguals are high and pointed.

The Pelvis, Hind Limb and Foot.—(Pl. XIV.) The pelvic region in No. 562 is in fairly good preservation and differs but little from that of *O. longipes*. The sacrum has five, instead of four, coössified centra. The femur and tibia though smaller exhibit no important differences, which is also true of the tarsals. The metatarsals of No. 664 are damaged proximally, but No. 562, which I have associated with the type, has this region of the hind limb better preserved, and shows the coössification of the palmar processes. Metatarsal II adheres closely to metatarsal III, and metatarsal V is absent, thus approaching the llama rather than *O. longipes*.

MEASUREMENTS OF LIMBS.

Greatest width of humerus at distal end.....	46 mm.
Greatest height of trochlea at distal end.....	34 mm.
Length of radius	284 mm.
Width of radius at head.....	41 mm.
Width of radius medially.....	31 mm.
Width of radius distally	46 mm.
Length of metacarpals.....	255 mm.
Total length of femur, approximately.....	270 mm.
Total length of tibia	328 mm.
Total length of metatarsals.....	267 mm.
Total length of proximal phalanx.....	55 mm.
Total length of median phalanx.....	28 mm.
Total length of ungual phalanx.....	25 mm.

OXYDACTYLUS COMPARED WITH OTHER LOUP FORK AND LATE OLIGOCENE GENERA.

Procamelus differs from *Oxydactylus* in the absence of the first and second pairs of superior incisors, and the union of the metapodials.²¹

The genus *Piliauchenia* differs generically from *Oxydactylus* by the absence of the second inferior premolar. *Protolabis* has short limbs

²¹ Some material in the American Museum of Natural History which is referred to this genus has the rugose attachment for the pads on the plantar face of the phalanges, and may have some relation to the genus *Piliauchenia*.

and neck, second superior premolar reduced, hypsodont dentition, and the metacarpals entirely separated; while *Oxydactylus* has the cervical region and limbs greatly elongated, no reduction in the dentition, brachyodont teeth, metacarpals entirely separate and the metatarsals coösfied only by their palmar processes. *Alticamelus* differs from *Oxydactylus* in its much greater size, by having the first and second incisors absent and the metapodials united. In *Protomeryx* (*Gomphotherium*) the limbs are comparatively much shorter than in *Oxydactylus*, the orbit is rounder and more anterior in position, the angle on the lower jaw is longer, and the metapodials are separated.

After a careful study of all the material at hand it is believed by the writer that *Oxydactylus* is most nearly allied to *Protomeryx* (*Gomphotherium*) from the John Day formation and that some form similar to *Alticamelus*²² in the Pleistocene is the termination of this phylum. While the characters in the dentition of the latter genus, are little changed from those in *Protomeryx*, the orbit is more oblong in shape and more posterior in position. The region between the alveolar border and condyles of the skull is also comparatively shorter. The greatly elongated limbs especially in *O. longipes* contrasts strikingly with the rather short limbs in *Protomeryx*.

*Alticamelus altus*²³ retains some important characters similar to those in *O. longipes*, although it is much larger and more modified than the latter. The small cranium, and the structure of the neck, limbs and phalanges are suggestive of *O. longipes*.

In the Pleistocene formation are remains of camels with greatly elongated limbs²⁴ and these may represent the termination of this line of American fossil cameloids. This phylum appears to be divergent from that of the true camels and we are at present able to trace it with some certainty to the genus *Protomeryx* of the upper Oligocene. *Oxydactylus* presents characters resembling both the recent camels and other Loup Fork genera, but some of these are doubtless due to parallelism in development and do not signify relationship. In *O. longipes* we seem to have an animal which in some respects is even more specialized than the recent Camelidæ while in other respects it is more primitive. The elongated cervical region with the comparatively longer limbs, the metacarpals being 15 mm. and metatarsal 8 mm.

²² *Memoirs Am. Mus. Nat. Hist.*, Vol. I, Part VII, page 422, 1901.

²³ *Memoirs Am. Mus. Nat. Hist.*, Vol. I, Part VII, p. 430, 1901.

²⁴ *Memoirs Am. Mus. Nat. Hist.*, Vol. X, p. 132, 1898.

longer than that of an adult specimen of *Camelus bactrianus* and the unguligrade structure of the phalanges are more specialized than those of the recent camels.²⁵ On the other hand the narrow and elongated cranium, the unreduced dentition, the separated metapodials and many minor characters present would be considered as primitive.

PROBABLE HABITS OF OXYDACTYLUS.

From the osteological structure of *Oxydactylus*, it would appear that specialization had been in the direction of those characters required for greater speed and endurance. The trunk became relatively lighter and the limbs stronger and more elongated than in earlier forms. The usual habitat was probably an open plain where long journeys from pasture grounds to water were necessary.

GEOLOGICAL NOTES.

Owing to the somewhat uniform character of the entire sedimentary mass of the Loup Fork series in Sioux County, Nebraska, some difficulty was met with in intelligently labeling material gathered from the different horizons. The Gering and Arickaree sandstones of Darton²⁶ attain a thickness of 900 to 1200 feet in this locality. For convenience and precision the writer divided the beds, temporarily, into three divisions. The *Lower Loup Fork, the Dæmonelix; and the Upper Loup Fork*. This arrangement was thought of importance in connection with the work carried on. Mr. Hatcher²⁷ divided the Arickaree sandstones into two distinct horizons overlaid by a third, the "Nebraska Beds" of Scott. In an ascending order the Loup Fork beds in this locality are according to Hatcher as follows :

The Gering Sandstones, consisting of some 200 feet of laminated, massive and cross-bedded sandstones.

The Monroe Creek Beds, composed of some 300 feet of very light colored, fine grained, not very hard, but firm and massive sandstones.

The Harrison Beds, composed of about 200 feet fine-grained, rather incoherent sandstones.

The Nebraska Beds, consisting of a series of buff-colored sandstones of varying degrees of hardness and unknown thickness. The Nebraska

²⁵ It seems to be generally accepted that the peculiar cushion foot of the Tylopoda was developed from the unguligrade condition.

²⁶ U. S. Geogr. S. Nineteenth Annual Report, Part IV, p. 735, 1897-98.

²⁷ *Proc. Am. Phil. Society*, Vol. XLI, No. 169, pp. 116-117

beds in this locality, as recently determined, can be of no greater vertical thickness than 150 to 200 feet.

The beds are exposed for four or five miles along the south side of the Running Water or Niobrara River a few miles east of the Wyoming and Nebraska State line. In the section shown in Fig. 3 the Nebraska beds have a thickness of about 70 feet. There are considerable exposures of the Nebraska beds on the south side of the Running Water River, and in places they have a vertical thickness of perhaps 200 feet.

Some fifteen miles south of the Running Water there is a series of exposures overlying the Nebraska beds. These exposures are undoubtedly the Ogalalla beds of Darton. No work was done in them by our party and their relation to the section here published is not sufficiently known to the writer to warrant any further mention.

The accompanying geological section extending from Squaw Butte on the northern face of the Pine Ridge which marks the northern limits of these beds at this locality, in an imaginary line southward for 15 miles, to the Running Water River represents the sequence of the various Loup Fork horizons in this region. The latest divisions

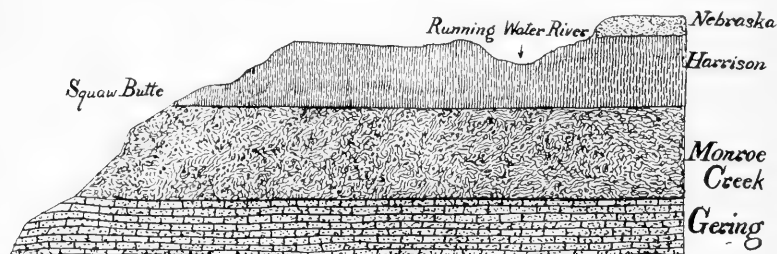


FIG. 3. Ideal section of Miocene formations from Squaw Butte to south side of Running Water River, Sioux Co., Nebraska.

and names proposed by Darton and Hatcher are used for the various horizons in the accompanying section (Fig. 3) and are believed, by the writer, to be the most satisfactory classification yet proposed of the Miocene beds in this locality. In the Gering horizon no fossil remains have been collected. The upper part of the Monroe Creek horizon has yielded some material, as has also the Harrison beds. The uppermost part of the section, or the Nebraska beds are apparently the richest in vertebrate fossils of the entire series. From this

horizon were obtained a rich and interesting collection, including the material described in the present paper.

The writer takes this opportunity of expressing his thanks to Mr. Hatcher for valuable suggestions and criticism, and to Professor Osborn for the free access given him to the various types and other material, relating to the subject, in the American Museum of Natural History in New York City.

The illustrations are from drawings made by Mr. Sydney Prentice, the draughtsman in the Section of Vertebrate Paleontology of the Carnegie Museum.

CARNEGIE MUSEUM,
October 16, 1903.

EXPLANATION OF PLATES.

PLATE IV.

- Fig. 1. Side view of skull of *Oxydactylus longipes*, type (No. 918).
Fig. 2. Top view of same.
Fig. 3. Palate view of same.
Fig. 4. Mandible showing crowns of dentition.
All figures $\frac{1}{3}$ natural size.

PLATE V.

- Fig. 1. Side view of atlas of *Oxydactylus longipes*, type (No. 918).
Fig. 2. Side view of axis of same.
Fig. 3. Side view of cervical 3 of same.
Fig. 4. Side view of cervical 4 of same.
Fig. 5. Side view of cervical 5 of same.
Fig. 6. Side view of cervical 6 of same.
Fig. 7. Side view of cervical 7 of same.
All figures $\frac{1}{3}$ natural size.

PLATE VI.

- Fig. 1. Side view of first dorsal of *Oxydactylus longipes*, type (No. 918).
Figs. 2, 3. Side view of dorsals, 6 and 7 of same.
Fig. 4. Side view of dorsal 9 of same.
Fig. 5. Side view of dorsal 10 of same.
Figs. 6, 7. Side view of lumbers 4 and 5 of same.
Fig. 8. Inferior view of sacrum of same.
All figures $\frac{1}{3}$ natural size.

PLATE VII.

- Fig. 1. External view of scapula of *Oxydactylus longipes*, type (No. 918).
Fig. 2. Front view of humerus of *Oxydactylus longipes*, cotype (No. 886).
Fig. 3. Posterior view of same.
All figures $\frac{1}{3}$ natural size.

PLATE VIII.

- Fig. 1. Front view of ulna-radius and carpus of *Oxydactylus longipes*, type (No. 918). Partly restored from cotype (No. 886).

Fig. 2. Front view of right fore foot of *Oxydactylus longipes*, type (No. 918). Partly restored from the cotype (No. 886).

Fig. 3. Posterior view of right fore foot of *Oxydactylus longipes*.

Fig. 4. Front view of phalanges of *Oxydactylus longipes*, type (No. 918).

All figures $\frac{1}{3}$ natural size.

PLATE IX.

Fig. 1. Superior view of pelvis, left side of *Oxydactylus longipes*, type (No. 918).

Fig. 2. Side view of same.

Fig. 3. Tibial side of femur of same.

Fig. 4. Front view of tarsus of same.

Fig. 5. Posterior view of cuboid of same.

All figures $\frac{1}{3}$ natural size.

PLATE X.

Fig. 1. Front view of femur of *Oxydactylus longipes*, type (No. 918).

Fig. 2. Front view of tibia of same.

Fig. 3. Front view of right metatarsals and phalanges of same.

Fig. 4. Posterior view of same.

All figures $\frac{1}{3}$ natural size.

PLATE XI.

Fig. 1. Side view of skull of *Oxydactylus brachyodontus*, type (No. 664.)

Fig. 2. Top view of small skull.

Fig. 3. Palate view of small skull.

Fig. 4. Mandible showing crowns of dentition.

All figures $\frac{1}{3}$ natural size.

PLATE XII.

Fig. 1. Inferior view of atlas of *Oxydactylus brachyodontus* (No. 562).

Figs. 2, 3. Side view of cervicals 2 and 3.

Fig. 4. Side view of cervical 5, type (No. 664).

Fig. 5. Inferior view of sacrum (No. 562).

All figures $\frac{1}{3}$ natural size.

PLATE XIII.

Fig. 1. Front view of distal end of humerus of *Oxydactylus brachyodontus*, type (No. 664).

Fig. 2. Front view of ulno-radius of same.

Fig. 3. Inner view of right ulno-radius of same.

Fig. 4. Front view of metacarpals of same.

All figures $\frac{1}{3}$ natural size.

PLATE XIV.

Fig. 1. Posterior view of humerus of *Oxydactylus brachyodontus* (No. 562).

Fig. 2. Front view of same.

Fig. 3. Front view of right tibia, type (No. 664).

Fig. 4. Front view of metatarsals, type (No. 664). Proximal end restored from No. 562.

Fig. 5. Front view of phalanges, type (No. 664).

PLATE XV.

The mounted skeleton of *Oxydactylus longipes*.

About $\frac{1}{12}$ natural size.



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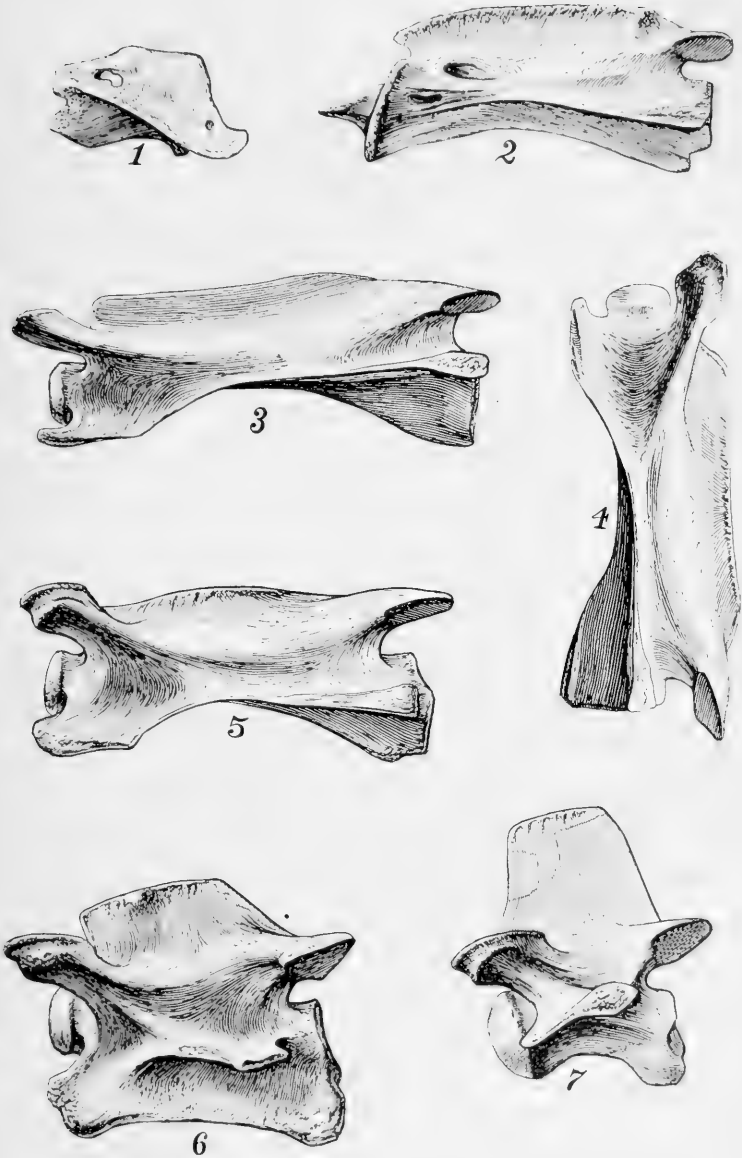


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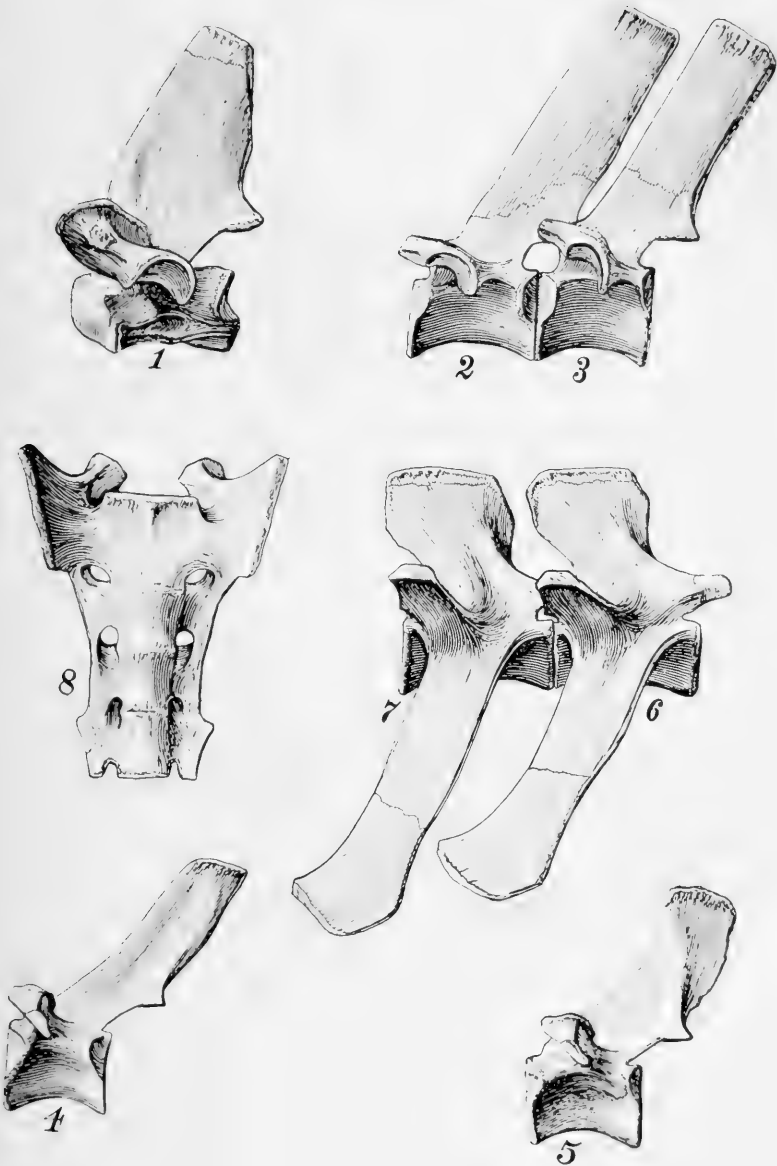


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Skull of *Oxydactylus longipes*.

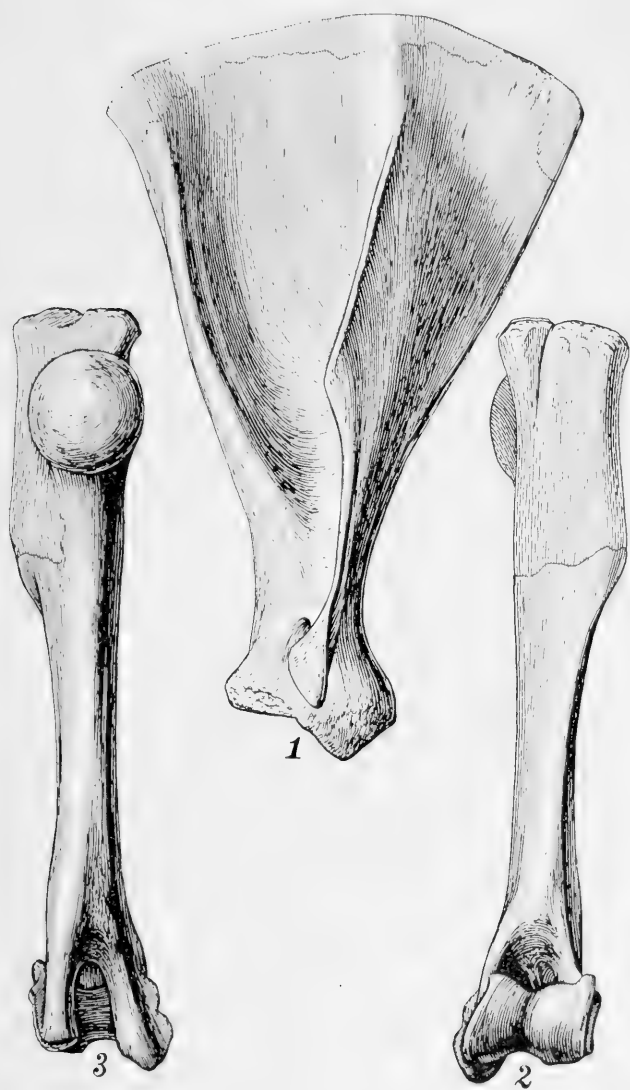


Cervical Vertebrae of *Oxydactylus longipes*.



Vertebræ of *Oxydactylus longipes*.





Humerus and Scapula of *Oxydactylus longipes*.

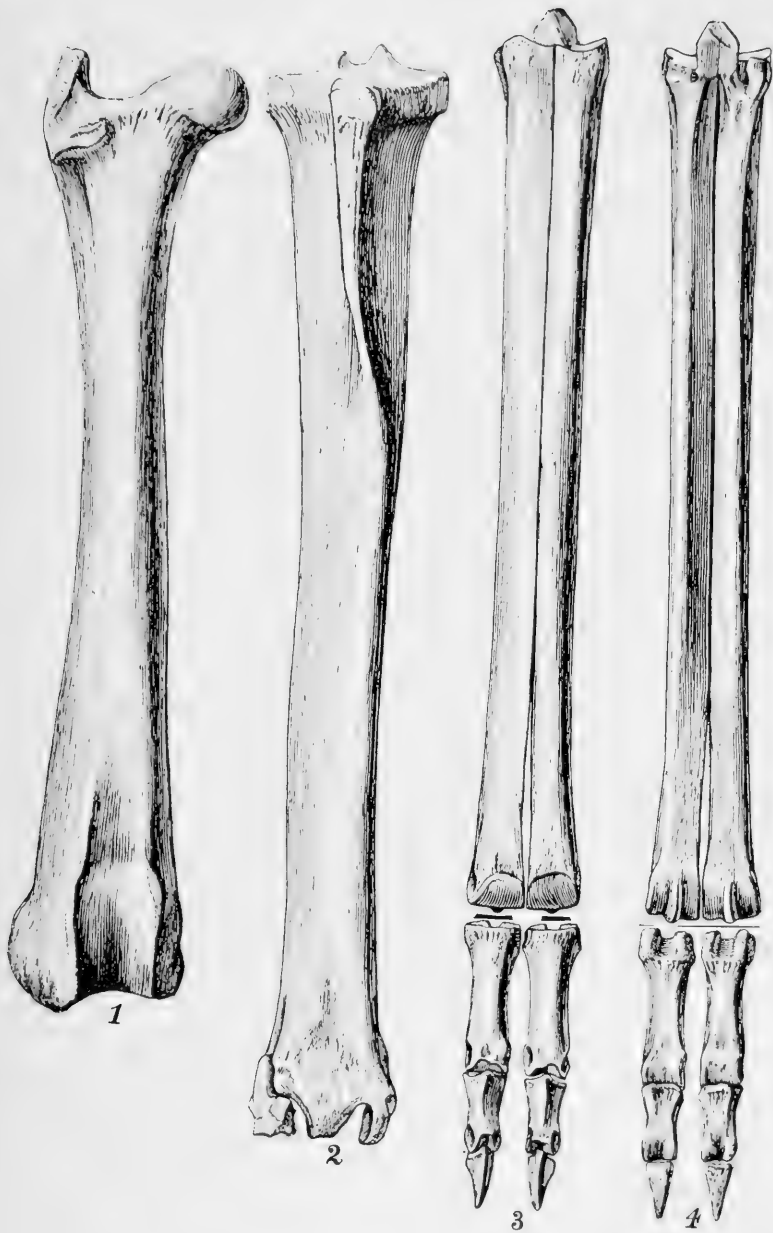


Forearm and Manus of *Oxydactylus longipes*.

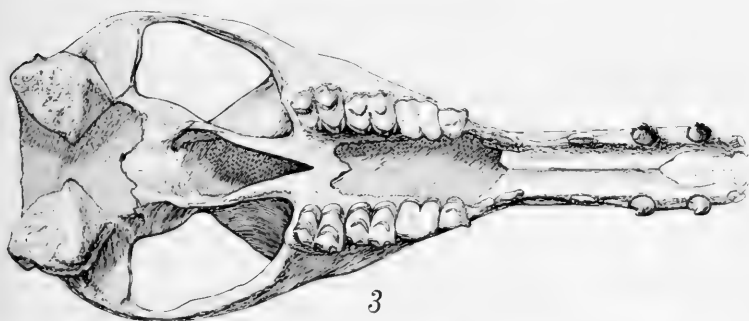
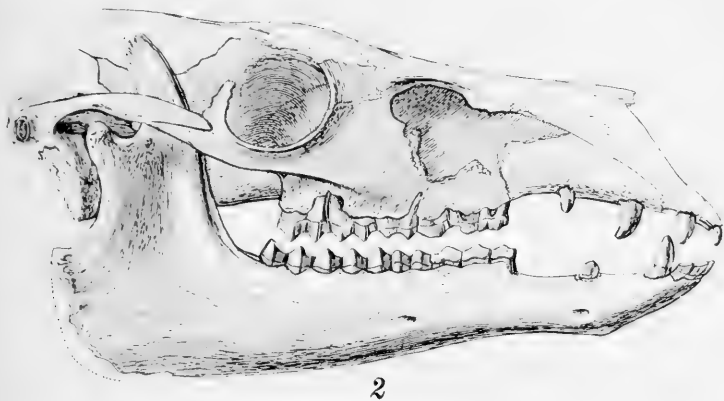
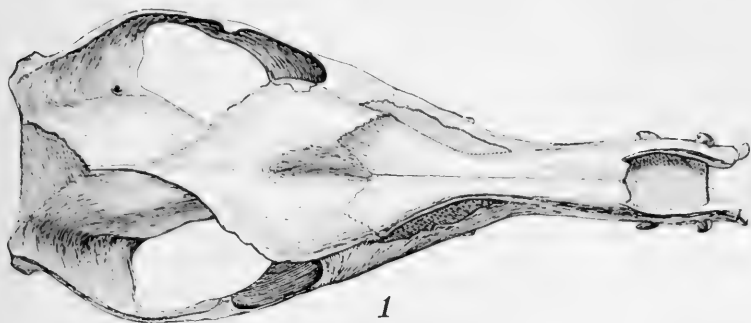


Pelvis, Tarsus, and Femur of *Oxydactylus longipes*.

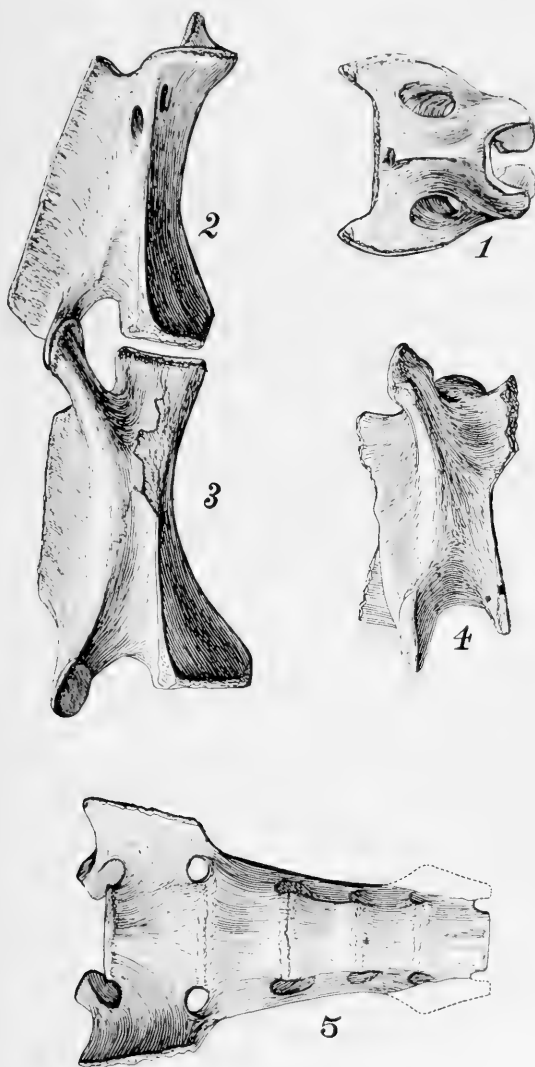




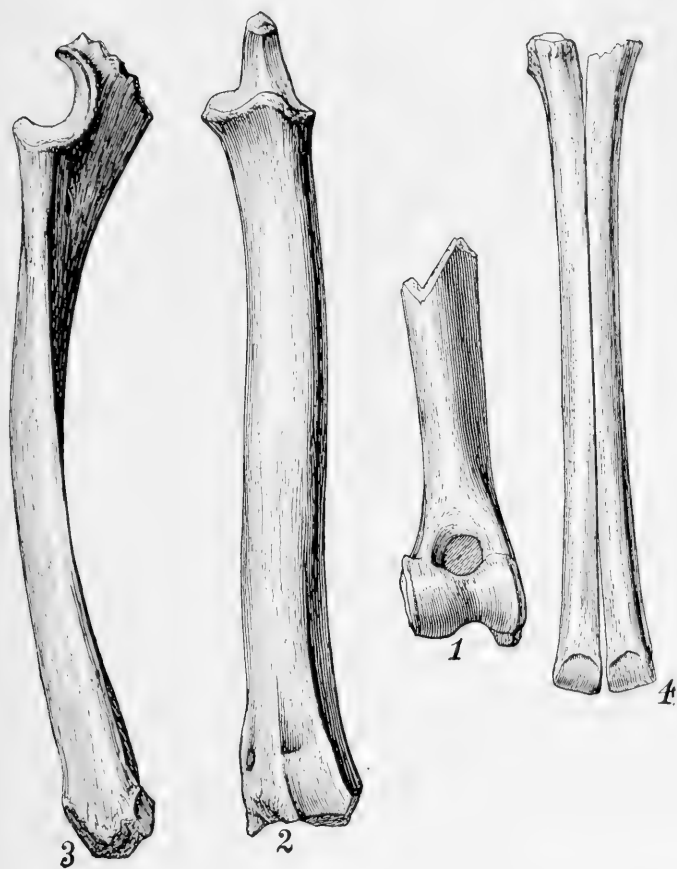
Femur, Tibia, Fibula, Metatarsus, and Phalanges of *Oxydactylus longipes*.



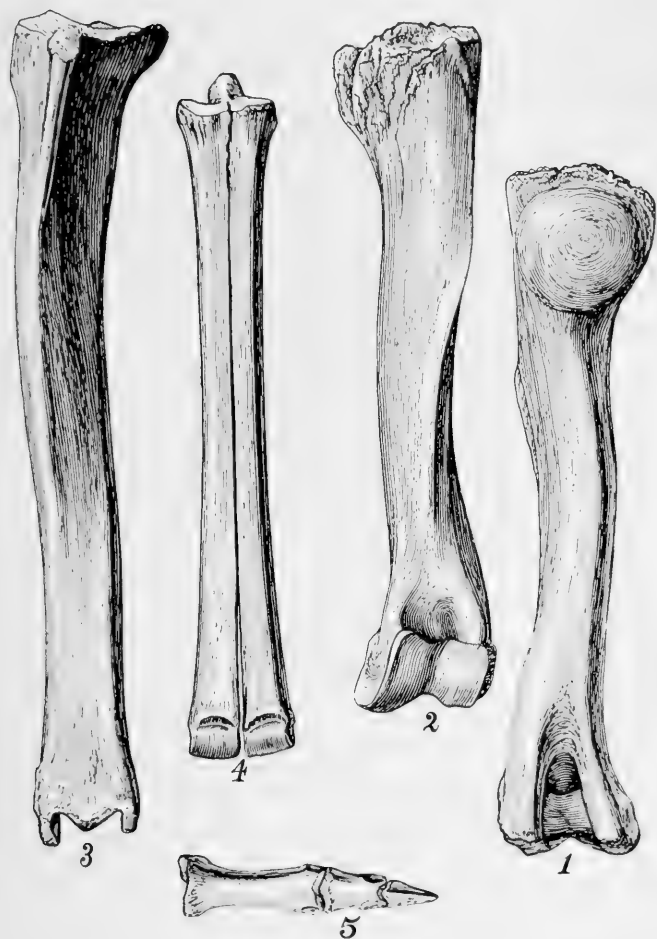
Skull of *Oxydactylus brachydontus*.



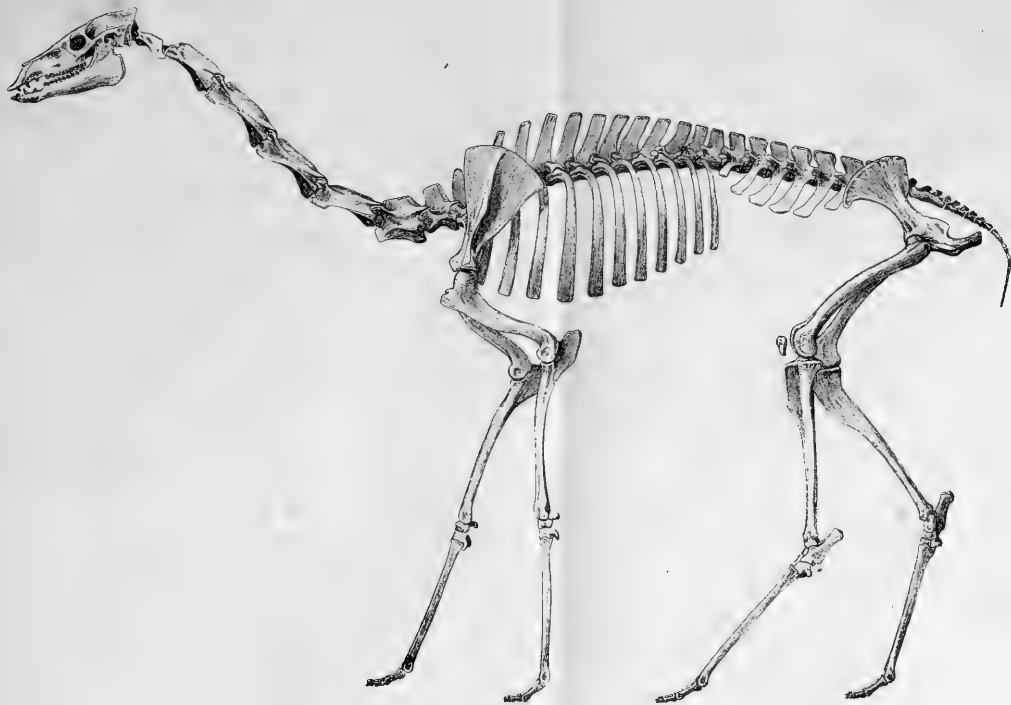
Cervicals and Sacrum of *Oxydactylus brachyodontus*.



Fore Limb of *Oxydactylus brachyodontus*.



Humerus, Tibia, Metatarsus, and Phalanges of *Oxydactylus brachydontus*.



Oxydactylus longipēs.



ANNALS

OF THE

CARNEGIE MUSEUM

VOLUME II. NO. 4.

EDITORIAL.

THE Editor feels much satisfaction in announcing the completion of the second volume of the *Annals*. This satisfaction, which in part springs from the contemplation of a completed task, is greatly enhanced by the pleasant manner in which the publications of the Museum have been received by scientific men throughout the world and the very flattering and favorable reviews which have appeared in many of the leading scientific journals.

MR. OTTO E. JENNINGS, who for two years past has been the assistant of Professor W. A. Kellerman, the Professor of Botany in the Ohio State University, during which time he acted as the Custodian of the Herbarium in that University, assumed on February first the position of Custodian of the botanical collections of the Carnegie Museum, taking the place made vacant through the resignation of Mr. J. A. Shafer.

MR. PERCY E. RAYMOND has been employed by the Director of the Museum to take charge of the collection of fossil invertebrates. Mr. Raymond is a graduate of Cornell. He has devoted considerable time to post-graduate studies in paleontology and geology, both at Cornell and Yale. He has had considerable experience as a collector and preparator. Mr. Raymond has been engaged continuously since he became connected with the Museum in the work of unpacking, and, latterly, of arranging and determining the invertebrates of the Bayet

collection, which happily passed through the conflagration of the warehouse in which they were temporarily stored without sustaining any material injury, for which the authorities of the Museum have officially expressed their gratitude to the officers of the Pittsburg Department of Fire, who, upon being apprised that the valuable collection of the Museum was in peril, made special efforts to secure it against loss.

THE library of the Museum has been enlarged by the acquisition of a great many important works during the past year. It is our intention ultimately to secure a complete set of the scientific journals published by various learned societies, so that access to the literature of the sciences on the part of all students in western Pennsylvania may be facilitated. A complete set of the publications of the Linnaean Society of London, a nearly complete set of the publications of the Wilke's Exploring Expedition, D'Orbigny's great work upon South America, the works of Humboldt and Bonpland on the botany of South America, La Sagra's *Historia Fisica de la Isla de Cuba*, the Flora of the Phillippine Islands, published under the direction of P. Fr. Andres Naves, a complete set of the writings, published and unpublished, of Townend Glover, a complete set of the Reports of the Challenger Expedition, are among some of the more recent and important acquisitions of the library of the Museum. Good foundations have been laid by the acquisition of works especially relating to paleontology, ornithology, entomology, and botany for systematic research. The execution of our plans, however, will be a work which will necessarily cover years. Meanwhile, the Museum, through the exchange of its publications with other kindred institutions, is securing a great deal of the contemporary literature of science.

THE fourth part of Volume I of the Memoirs of the Museum, containing Mr. Ashmead's paper on the Chalcidoidea, has been published. It will shortly be followed by another from the pen of the same author, founded upon other collections made by Mr. Herbert H. Smith in South America and belonging to the Carnegie Museum.

THE work of reproducing the skeleton of *Diplodocus carnegii*, which Mr. Carnegie has authorized the Director of the Museum to have made for the British Museum, is proceeding rapidly under the direction of

Mr. J. B. Hatcher, the Curator of Paleontology, and it is hoped within the year to complete the work, which has proved itself to be an undertaking attended with no small mechanical difficulties, which have all been happily overcome. Recent discoveries show that the length of this monster exceeded considerably the original estimates based upon the first specimen collected by the Museum. The caudal vertebræ are found to have been more numerous than was originally supposed, and far more numerous than is shown in the restoration of the caudal region published a few years ago by Professor H. F. Osborn.

THE Director of the Museum has received recently, through the kindness of Mr. S. E. Gill and Mr. G. Rutledge, the President and Superintendent of the Parral and Durango Railway in Mexico, a number of specimens of the curious communal habitations built by the larvæ of *Eucheira socialis* Westwood, and has been enabled to make a number of interesting observations upon the life-history of these insects, which it is his intention shortly to publish with appropriate illustrations in the *Memoirs* of the Museum.

MR. J. A. MUNSON has been employed to assist Mr. C. V. Hartman, the Curator of Archæology and Ethnology, in the work of arranging and cataloguing the Costa Rican collections acquired by the latter for the Museum. The Velasco collection, which was deposited at the Museum of Archæology of the University of Pennsylvania in Philadelphia, has been brought to Pittsburgh. It is known that the collection of Costa Rican antiquities at the Carnegie Museum now exceeds in size all other collections from that country save only the collection in the National Museum of Costa Rica at San José. There are more Costa Rican antiquities in the Carnegie Museum than there are in all the other museums of the world combined.

THE Section of Mineralogy of the Museum has acquired a fine series of calcite crystals from Joplin, Missouri, among them one colossal pink calcite twin, over fourteen inches in its longest diameter.

THE Museum is deeply indebted to Mr. Henry Fairfield Osborn, of the American Museum of Natural History, for a reproduction in plaster of Mr. Charles Knight's excellent and spirited model of the five-toed horse, *Protorohippus*, which has attracted a great deal of attention.

THE magnificent specimen of *Promerycocharus*, discovered by Mr. O. A. Peterson, showing the skeletons of three individuals, lying *in situ* as they died and were covered up by the drifting sands, has been recently installed in the Museum, where it is greatly admired by those who understand the scientific significance of the specimen. It is believed to be the finest thing of its kind anywhere in existence.

THE great collection of birds belonging to Mr. A. W. Anthony, of Portland, Oregon, has been purchased by the Museum and has been received, with the exception of some minor portions of the collection, which were for the time being in the hands of specialists, but which will be shortly turned over to this Museum. The acquisition of this collection brings the total number of birds in the ornithological collections of the Museum up to nearly twenty-five thousand. Of the birds of North America the Museum now contains specimens of more than three-fourths of all the species known to occur north of the Rio Grande of Texas.

IX. THE BIRDS OF ERIE AND PRESQUE ISLE, ERIE COUNTY, PENNSYLVANIA.

BY W. E. CLYDE TODD.

INTRODUCTORY NOTE.

Soon after the writer's purpose to prepare a comprehensive work on the birds of Western Pennsylvania had assumed definite form and shape, now almost ten years ago, it became evident that such a work would be far from complete should it not include the results of a special investigation of the avifauna of that portion of the State bordering upon Lake Erie. Not only were many species of water birds, not to be found elsewhere in western Pennsylvania, reported from that locality, but the influence of the lake, as a factor affecting the distribution of bird-life, seemed also to demand study. Hence the project was early formed of spending an entire season at this point, but circumstances forbade the realization of the plan until the year 1900, when the writer, having meanwhile become identified with the Carnegie Museum of Pittsburgh, was able to carry out his long-cherished idea under the auspices of that institution. As an assistant on the expedition there was engaged Mr. Willis W. Worthington, of Shelter Island, New York, to whose ability as a collector and observer the success of the trip was in large measure due. Almost one thousand specimens were secured. The exact dates of our stay were: March 21—May 31, and August 20—November 20, thus covering both migration periods fairly well. In the spring our headquarters were rather inconveniently located in the city of Erie, but in the fall they were removed to a house-boat anchored in Misery Bay on the Peninsula, greatly facilitating field-work.

In view of the many interesting records that have been accumulated it has been thought best to publish the results of this trip in advance of the writer's general work on the birds of Western Pennsylvania, for which they were originally intended, the more so as the completion of the latter is apt to be delayed for some time. The present paper, therefore, is based on the data secured in the season of 1900, but also includes all other available information upon the birds of this par-

ticular locality, so that it is a complete summary of our present knowledge of the subject. There have been utilized some notes made by the writer during other brief visits in 1893 (August 28-30), 1895 (June 17), 1899 (June 26-27), 1902 (December 9) and 1903 (August 22). To Mr. Ralph B. Simpson, of Warren, Pa., the writer is under obligations for the use of the notes made upon his various visits to Erie, as follows: September 5-19, 1900; April 24-27, September 25-27, November 17-23, 1902; April 13-16, November 10-14, 1903. Mr. Archie M. Howes, of Erie, has contributed some notes on the nesting of several species, and Mr. James Thompson, of the same place, has courteously supplied information in regard to certain specimens in his collection. The late Hon. George B. Sennett had made extensive observations on the avifauna of this section, but his note-books are not now to be found, and are thought to be lost. Their loss is a serious matter, made up only in small part by an examination of Mr. Sennett's collection of birds and a study of the records published at second-hand in Dr. B. H. Warren's "Birds of Pennsylvania." By far the most important contribution, however, has been by Mr. Samuel E. Bacon, of Erie, who has placed his notes on the birds of this region, covering the years 1888 to 1904 inclusive, at the writer's disposal. Although his object was nearly always the pursuit of game birds, and the notes gathered on the smaller species are necessarily of a fragmentary character, yet the data received from this source admirably supplement those obtained by our party in 1900, and have been extensively used in the preparation of the present report. Many specimens of Mr. Bacon's collecting are now in the Carnegie Museum, while some are deposited in the U. S. National Museum as a part of the collection of the Biological Survey. In addition to the original notes above enumerated, all the known published records referring to the birds of the locality under consideration have been collated, and the information contained incorporated with that from the various other sources.

Attention should be called to the fact that an intelligent understanding of the life and distribution of birds in the region of the Great Lakes will be only had when a thorough study has been made of other favorable localities along their shores. The data at present available are too fragmentary, scattered, and indefinite to permit of proper correlation. The few local lists that have appeared are generally inadequate and disappointing, and for many places of probable interest no data are available. In the case of Lake Erie, for example,

a study of the birds of Long Point, on the Canadian shore opposite Presque Isle, would be a most welcome contribution to the general subject, and would afford a basis for a comparison that could not be otherwise than interesting and instructive.

In the present list, for the sake of uniformity, the nomenclature and sequence of species given in the "Check-List of North American Birds," published by the American Ornithologists' Union, have been followed, with, however, a few lately published changes which have been proposed, but not yet formally accepted. Species whose occurrence is to be expected, but which have not been actually recorded, are included in their proper places, enclosed in brackets, usually with a brief statement of their extralimital records and with the proper references.

Acknowledgments are due to all the parties above named as having contributed notes for use in the present connection, and also to Mrs. George B. Sennett, for permission to consult the collection of her late husband; ¹ to Dr. J. A. Allen, for his courtesy in affording the necessary facilities for examining the same, and to Dr. A. K. Fisher and Mr. Harry C. Oberholser for assistance in preparing the bibliographical list and in identifying certain species.

GENERAL INTRODUCTION.

Erie County occupies the extreme northwestern corner of Pennsylvania, giving the State a northern frontage on Lake Erie of more than forty miles, beginning at the Ohio line near its intersection with the parallel of forty-two degrees north latitude, and extending in an approximately east-northeastern direction to the New York boundary. Its area is about seven hundred and seventy square miles, mainly devoted to agricultural pursuits, comprising as it does some of the best farming country in the western part of the State. Erie is the county seat and chief city, with a population (in 1900) of almost fifty-three thousand inhabitants. Manufactures of various kinds constitute the principal industries of the city, although there is also carried on a considerable commerce in lumber, grain, coal, and ore, chiefly with other cities on the Great Lakes. A capacious but shallow harbor is created by a strip of low-lying land forming the arc of a circle, and joined to the mainland at its western extremity, leaving an entrance on the east, now partially closed by an artificial breakwater. This strip of

¹The bulk of this collection is deposited in the American Museum of Natural History at New York, but nearly all the mounted specimens were presented to the Carnegie Museum by Mr. Sennett a few years before his death.

land is known as Presque Isle, or the Peninsula, while the enclosed water is Presque Isle or Erie Bay — the former name in each case being a souvenir of the French occupation of this region.

The mean level of Lake Erie is five hundred and seventy-three feet above tide. Extending along the lake front is an almost level alluvial strip some two or three miles in width, which is known as the lake shore plain. It lies at an elevation above the lake of from one hundred to one hundred and sixty feet, most of which difference in level is represented by a steep bluff rising just back of the beach of the lake. The lake shore plain has a sandy soil, and is regarded as the best farming land in the county, hence its woodland has almost disappeared. It is in this cleared area, most of which is under cultivation, or given over to grazing, that such birds as are partial to open country find their most congenial haunts. Scattered here and there, and particularly on the slopes of the high ridge that limits the plain on the south, there yet remain some groves of hardwood timber, consisting largely of oak (*Quercus*, several species), chestnut (*Castanea dentata*), walnut (*Juglans nigra*), butternut (*Juglans cinerea*), beech (*Fagus atropurpurea*), wild cherry (*Prunus serotina*), maple (*Acer rubrum*), hickory (*Hicoria spp.*), elm (*Ulmus Americana*), and cucumber-tree (*Magnolia acuminata*), and a great deal of second-growth poplar (*Populus sp.*). In many places the bluff facing the lake shore is covered with a rich woods composed largely of hemlock (*Tsuga Canadensis*), which growth often encroaches upon the adjacent level land, and may have originally covered much more of this area. In these woods are found several species of birds which have not been detected at all upon the Peninsula. A belt of swampy land about three-fourths of a mile wide formerly extended along the lake shore plain from the Ohio line to a point about twelve miles east of Erie. Even now, with drainage systems on every farm, there are still left considerable areas of marshy ground, with occasional scattered ponds, where ducks and other waterfowl sometimes alight, and rails and snipe are found in their season, and, indeed, in early times this strip was famous ground for these kinds of game birds.

South of the lake shore plain the country is much more heavily wooded, and doubtless the bird-life is correspondingly affected, but a discussion of this question does not come within the limits of the present paper. The ridge overlooking the plain is some four or five hundred feet above the level of the lake, and beyond this the land is of

a rolling character, culminating in a drainage divide averaging two hundred feet higher yet. From these highlands numerous small and a few larger streams, such as Elk, Walnut, and Mill Creeks, descend to Lake Erie, breaking through the intervening hills and the terrace formation in the lower portion of their courses, in a series of deep gorges or gullies, which are one of the most striking topographical features of this section. Mill Creek empties into Presque Isle Bay at Erie, and is utilized as one of the outlets of the sewage of the city. The marshes and mud-flats at its mouth constitute one of the best feeding-grounds in this whole region for many kinds of shore-birds and aquatic fowl during the season of migration. Being so near the docks and railroad yards, however, it is far from being a safe haven for the birds, and large numbers are often killed here by gunners; but if shooting were forbidden on these few acres it is probable that here, during the fall migration, more varieties of shore-birds could be seen than at any other one point in Pennsylvania.

The Peninsula has a roughly semicircular outline, about seven miles long in arc (measured on the outside) and five and one-half miles in chord. Near its western extremity and junction with the mainland (about two and one-half miles west of the city limits) — known locally as the “Head” — it is quite narrow, in some places an interval of less than one hundred yards separating the waters of the lake and bay. To the east, however, it gradually widens until it attains a breadth of one and one-fourth miles from shore to shore. An arm of Erie Bay, known as Misery Bay, occupies a rounded indentation just east of the widest part, the land curving around its eastern shore for some distance to the southward, terminating abruptly in an artificial pier along the channel leading from the lake, where are ranged the buildings belonging to the United States Lighthouse and Life-saving Station. The entire Peninsula is the property of the General Government, and the only other buildings upon it are those in connection with the lighthouse on its north shore, known locally as the “flash-light,” but officially as “Presque Isle Light.”

In a geological sense the Peninsula is merely an immense sand-bar, the manner of the formation of which may easily be traced, as all the various stages are represented. The action of the wind and waves has at intervals raised a bar parallel to the shore-line, with which, in course of time, it has become united at one or both ends, enclosing a pond, whose margins have gradually grown more and more marshy as the

general depth decreased with the filling up of the water area. The formation of these sand-bars is accelerated by the great storms which annually visit this region, by which sometimes the entire configuration of the shore is changed in a single day. At such times the level of Lake Erie may rise several feet, and in the overflow and recession of its waters there may be cut channels again connecting the newly formed pond with the larger body of water, which outlets may persist permanently. Moreover, there is a continual shifting movement of the loose sand going on in the direction of the prevailing westerly winds, so that there is a constant tendency toward contraction at the west and expansion at the east. Indeed, the western end of the lake beach of the Peninsula is much in need of protection, it having in several places been washed quite away, leaving large trees standing in the water twenty or thirty feet from shore.

To the combined and long-continued action of these various influences the peculiar topographical features of the Peninsula, as it is today, may be ascribed. It consists of a series of parallel wooded ridges, separated by comparatively shallow ponds or marshes, usually of complex structure. Its outer shore (facing the lake) is for its entire length a smooth sandy beach, referred to in the present paper as the "outside beach." This beach is widest towards the east, where it includes several unnamed ponds, back of which lies an extensive area of sand-dunes, covered with a scanty growth of grasses, herbage, and in places bushes of the wax-myrtle or bayberry (*Myrica Carolinensis*), and scattered low trees or shrubs of a species of poplar (*Populus deltoides*). There are a few ponds in this area also. Beginning about half a mile east of the flash-light, however, the slope of the outside beach is abruptly terminated by a low bluff to whose edge the wooded ridges extend, so that to the westward there are very few sand-dunes, such as have just been described. The ground of this kind gives way at length to the first of the ridges, which is characterized by irregular sand hills covered with tufts of coarse grass, and supporting poplar trees of considerable size, also many grape-vines (*Vitis sp.*), and south of this again there grows a variety of deciduous trees, with abundant undergrowth, before any of the larger ponds are reached.

Horseshoe Pond is the name given to an oval body of water occupying most of the extreme southeastern part of the Peninsula, near the Government buildings. It is the deepest of the ponds. Its shores are sandy save for a space along the western side, and it has (at present)

no permanent outlet, although originally connected with the channel at the pier. It would seem to be of comparatively recent formation. Northwest of Horseshoe Pond, after an interval of sand-dunes bearing poplar trees, and occupying the depression beyond the first wooded ridge, is Niagara or Lake Pond (Plate XVII), the outlet of which is into Misery Bay. It is divided into two main portions by a narrow tongue of land extending from the north, and its shores are everywhere marshy and fringed with a dense growth of aquatic plants. Yellow Bass Pond, opening also into Misery Bay by a tortuous channel, lies just beyond the intervening strip of woodland, and is very similar in character to Niagara Pond. It is succeeded in its turn by a long, narrow, shallow body of water known as Ridge, or Dead Pond, so called, perhaps, because during the summer months it largely dries up, as also do some of the other smaller ponds having no visible connection with the bay, which would indicate that they are mainly dependent on the rains for their water-supply. Ridge Pond is entirely enclosed by a dense growth of bushes, and along its southern margin there runs a board-walk connecting Presque Isle Light with the Government boat-house at the head of Misery Bay. Just west of this bay is Graveyard Pond, and beyond this again Big Pond (Plate XIX), which has, or had in 1900, an artificial outlet to the south. Big Pond, with its intricate system of arms and channels, is a veritable watery labyrinth. From it a narrow passage leads into Long Pond, the name of which suggests its shape. Long Pond is deeper than any of the other ponds except Horseshoe Pond, and its margins are not marshy to any extent, a dense growth of low bushes extending to the edge of the water in most places. West of Long Pond are two small ponds known as the Lily Ponds, closed in by dense shrubbery. The only other pond of importance in this connection is Cranberry Pond, a long, narrow, enclosed body of water lying between and parallel to Ridge and Long Ponds, south of the board-walk. In addition to those above mentioned, there are a number of smaller ponds, particularly in the western portion of the Peninsula, not dignified by special names, as well as areas of marshy savanna which were doubtless once open ponds, and have become filled up in the course of time. Nearly all the ponds have a thick layer of mud covering the sandy bottom, so that it is usually unsafe to attempt wading. At low water several of the ponds present muddy margins, which are very attractive to some species of shore-birds, but the "dead" ponds in the western part of the Penin-

sula are surrounded by a dense growth of bushes, which encroach upon the water to such an extent, that, even when the ponds are low, there is no beach exposed.

The vegetation of these various ponds and marshes is profuse indeed. Along their edges is a rank growth of rushes (*Juncus*), marsh grasses, arrow-leaf (*Sagittaria*), and cat-tail (*Typha latifolia*), giving way, in deeper water, to pondweed (*Potamogeton*), yellow water-lily (*Nymphaea variegata*), and others fully as characteristic. In Niagara, Yellow Bass, and Graveyard Ponds wild rice (*Zizania aquatica*) grows in abundance, and accordingly these are the favorite haunts of coots, rails, bitterns, and the like. The ducks would no doubt also relish the wild rice, but as they can be so readily approached when feeding among it, they soon learn that the more open ponds are safer, at least in the daytime. In the drier portions there are extensive areas of dense thicket, while the largest tracts of heavy timber are found on the higher ridges west of Big Pond (Plate XVIII). The surface of these ridges is very uneven, everywhere showing the peculiar sand-hill formation. Oaks of several species constitute perhaps the bulk of the forest, although there are considerable areas almost entirely given over to white pines (*Pinus Strobus*), the trees of which, although well developed, do not attain the height elsewhere observed.

Erie Bay, constituting the harbor of the city of Erie, is about four and one-half miles in length, with an average width of one and one-half miles. The channel giving entrance from the lake opens into its eastern end, between the pier at the Life-saving Station and the break-water, built out from a point of land, known as the "sand-beach," just east of the mouth of Mill Creek. This is a favorite spot for shore-birds, as mentioned above. The shores of the bay are sandy for the most part, but the beach is by no means so wide as that along the outside shore, and much of it is littered over with driftwood. West of "Big Bend," however, there are extensive marshy areas, and the shallow water here is almost as good feeding-ground for the "pond ducks" as the ponds themselves. Here also at times of low water are extensive mud-flats, frequented by many species of waders. Except these marshes and the Mill Creek flats, the shore of the bay has no marsh or beach that would attract anything but a Spotted Sandpiper, and the same may be said of the whole lake shore of Erie County, exclusive, of course, of the Peninsula. The shallower parts of the bay support a number of aquatic plants in considerable abundance, among

which may be mentioned wild celery (*Vallisneria spiralis*), which is particularly in evidence about Crystal Point, at the entrance to Misery Bay.

The proximity of a large body of water such as Lake Erie necessarily exerts a marked influence upon the climate of the adjacent region. These climatic peculiarities were described in detail many years ago by Dr. J. P. Kirtland (*American Journal Science and Arts*, Second Series, XIII., 1852, 215-219), with whose observations at Cleveland, Ohio, those of the writer agree so far as they go. In general, it may be said that the lake exerts a *tempering* effect upon the climate. As a rule, neither the cold of winter nor the heat of summer reach the extremes felt by localities south of the lake shore and removed from its influence. Moreover, on the other hand, the several seasons are successively later. During the winter Lake Erie is entirely frozen over, and the presence of such a vast quantity of ice, yielding as it does very slowly to the influence of returning warmth, absorbs the bulk of the atmospheric heat in the melting, and thus keeps the air cold and raw and the weather inclement until the completion of the process. So long, therefore, as there remain any considerable bodies of ice on the lake, spring will make but little advancement, but "no sooner do they disappear than spring sets in with a reality, and vegetation puts forth with *sub-arctic* rapidity." Thus, in the season of 1900, the spring seemed to the writer, accustomed to a locality only a hundred miles to the south, exceedingly cold and backward (May 23 having been the first moderate day), yet it would seem that this particular season was not exceptional in this respect. Then, too, the hot weather persists much longer in the fall, and killing frosts are usually later by a month or more, than in the region just to the south. Indeed, the woodland, shrubbery, and most of the herbage on the Peninsula presented almost as green and fresh an appearance the first week in November, 1900, as in September along the Ohio River, while the first destructive frost did not come until November 14. Previous to this date, however, snow could be seen covering the high ridge south of the lake shore plain, and the foregoing remarks are evidently applicable only to the narrow strip of comparatively low land contiguous to the lake.

In spite of these peculiar climatic conditions, the dates of the migration of birds seem not to be appreciably affected thereby, corresponding very closely to similar dates from adjacent regions. The only

exception to this statement is in the case of certain waterfowl, the length of whose stay in the fall is largely dependent upon the prevalence of open water. The trend of the migration at this point is not exactly clear, and whether birds follow the shore of the lake until they come to a convenient crossing-place at its extremity, or boldly adventure themselves in direct flight across its expanse, is not with certainty known. There are, however, indications that the latter route is sometimes followed, not only by some of the water birds, to many of which a flight over water is devoid of risk, but by certain of the smaller land birds as well. Flocks of some species have repeatedly been seen, supposedly in direct migration, flying out to the open lake or coming from that direction. As Long Point is the nearest land on the Ontario side, and is directly opposite Presque Isle, the inference that this was the starting-point or destination of such flights seems not unreasonable. On several occasions small land birds were picked up dead on the lake shore, leading to the inference that they had attempted the direct flight and had failed. Another circumstance worthy of mention in this connection is the greater abundance of the smaller land birds in spring migration at the *eastern* end of the Peninsula. It is as if they congregated here in their passage along the coast before their flight across the lake. It is noticeable, too, that in the fall the shore-birds are met with first on the most northerly part of the outside beach, which they would naturally strike first in coming directly across the lake, thence crossing at the piers to the sand-beach on the mainland shore, or flying to the ponds and other points on the Peninsula. The keeper of Presque Isle Light says that birds do not strike the lantern there, save on very thick and foggy nights, and that the number so killed in the course of a season is inconsiderable.

In the nature of the case the locality under consideration is perhaps the most favorable in the entire State of Pennsylvania for the study of water birds. Quite a number of such occur here which have not been detected in the interior counties, while among the land birds not a few are far more abundant and characteristic. Were it not for the proximity of such a large city, Presque Isle would doubtless be an ideal spot for birds of almost all kinds, and many species the appearance of which is at present rare and irregular would be much more numerous. The persecution to which the birds of this locality are constantly subjected by the hordes of gunners from Erie has resulted in a great reduction in their numbers as compared with former years, and not a

few species which were once common are now rarely seen. Although the Peninsula is government property, and as such is carefully protected from other forms of vandalism, there is absolutely no restriction placed upon the extermination of its feathered inhabitants. The place is overrun with pot-hunters, market-gunners, and irresponsible sportsmen, who keep the game constantly stirred up, and whose pernicious activity has resulted in driving away not only many species which are considered legitimate objects of pursuit, but also numerous other kinds, which, if not valuable for economic or æsthetic reasons, are at least harmless. Immense bags of wild-fowl and shore-birds are sometimes made by ignorant and conscienceless gunners, actuated by greed of gain, or merely by the desire to kill, and the game-laws are being constantly violated. Of course, such slaughter, all too common as it is throughout the country, will eventually render its own continuance impossible. In the present case the abolition of spring shooting, which would require for its consummation a legislative enactment, would most certainly inure to the limitation of this destruction. A restriction upon the number of birds which one person may kill in a day would tend in the same direction. The prohibition of all shooting, or, if need be, of all trespassing, upon the Peninsula and its adjacent waters, would be a most effectual measure. There is no reason why various species of ducks and other water-birds should not breed about the ponds and marshes of Presque Isle ; the conditions, all save that of insufficient protection, are unaltered from former years, when such was regularly the case. Finally, the strict enforcement of the game-laws and the education of public sentiment would be of inestimable advantage, and might yet avail to prevent the threatened extermination of some forms of bird-life at this interesting locality.

In the present connection some general observations on the avifauna of Erie contributed by Mr. Samuel E. Bacon, a conscientious observer, whose extensive experience adds value to his statements, are of such interest that they are deemed worthy of insertion. "As regards the relative abundance of birds now (1903) as compared with 1888, when I first began taking notes, I hardly know what to say. I certainly think that the song-birds have held their own. The birds of prey seem to have sadly diminished. Ten or fifteen years ago the first mild days in spring used to bring hawks by the hundreds, but of late years it is seldom that more than a pair are in sight at once. A

decrease is noticeable, too, in the numbers of ducks and waders, but I think that the curtailing of their feeding-grounds and the continual persecution to which they are subjected from the moment of their arrival has led them to seek more secluded localities. In October, 1901, there was an almost unprecedented flight of 'pond-ducks' (*Anatinæ*), and in some cases bags of thirty, forty, and even fifty birds were made. I saw a bag of forty-two (mostly Mallards) killed on the morning of October 17 by two gunners. This hardly looks as though the ducks were a thing of the past, and yet the next season there may be no shooting of any consequence. Presque Isle Bay is the only feeding-ground of any size for many miles on the south side of Lake Erie, but with sixty thousand people living right at its shore, the ducks have little chance to feed. The shallow water species, such as the Mallard, Black Duck, Teal, Widgeon, Wood Duck, Pintail, and Hooded Merganser are found in the ponds and along the bay shore of the western portion of the Peninsula. These kinds, particularly the Mallard, when persistently hunted, will fly out into the middle of the bay to spend the day, returning at dusk to the ponds, where I have watched them feeding in the moonlight. The Scaups, Redheads, Golden-eyes, Buffleheads, Scoters, Long-tailed Ducks, and Red-breasted Mergansers are found in the deeper waters of the bay, or rather would be found there if unmolested, but, so accustomed have they become to being disturbed, that daylight generally sees them on the move for the main lake, where, if it is not too rough, they spend the day, returning to the bay about dusk. This is of course not the invariable rule for all the deep water ducks, for some stay on the bay in spite of the gunners, and some species would no doubt go to the lake to feed in any case. In flying to and from the lake the ducks either cross the narrow neck of the Peninsula to the west, or go over the breakwater pier at the eastern end of the bay, which place has been a famous ducking point in years past.

"The shore-birds would seem to have fallen off considerably in numbers in the last six years, but in this period there has been very little low water, and the flats at the mouth of Mill Creek have grown up with weeds to such an extent that their favorite feeding-grounds are greatly diminished. Many species have seemed to be almost if not quite unrepresented of late years. The fall flight of Red-backed Sandpipers was formerly looked forward to as being as certain as the close of navigation, yet there has been no flight of these birds since

1897, and that was a small one, a few hundred birds in all. The Pectoral Sandpiper was practically not represented in the migrations of 1900, but the following year it was found in small numbers. The White-rumped and Stilt Sandpipers, the Knot, Red-breasted Snipe, Hudsonian Curlew, and Northern Phalarope ought, in my judgment, to occur here regularly, but certain it is that we get very few shore-birds, other than Yellow-legs (both species), Semipalmated Plover, Killdeer, Least and Semipalmated Sandpipers, Sanderlings, and an occasional Black-bellied and Golden Plover. I hope that the decrease apparent in water-birds of nearly all kinds merely means that they are migrating by safer routes, but I fear that what I have noted at Erie is but a fair sample of what has been observed throughout the country."

Two hundred and thirty-seven species of birds have been recorded from the region of which this paper treats—a larger number than have been observed in any other area of similar size in the western part of Pennsylvania, and the list is still obviously far from complete. Moreover, it is evident that further observations would add largely to the notes on the seasonal occurrence and abundance of many of the less common species. Considerable difficulty has been encountered in attempting to classify the various components of the avifauna according to their seasonal status, as in some cases such is uncertain or indeterminate, and the lists that follow must be regarded as provisional only, and subject to modification in the future.

Eighteen species are to be classed as permanent residents, two of them doubtfully, as their occurrence throughout the year is inferred rather than known. They are:

<i>Colinus virginianus</i> ,	? <i>Centurus carolinus</i> ,
<i>Bonasa umbellus</i> ,	<i>Otocoris alpestris praticola</i> ,
<i>Nyctalops wilsonianus</i> ,	<i>Cyanocitta cristata</i> ,
<i>Syrnium varium</i> ,	<i>Astragalinus tristis</i> ,
<i>Cryptoglaux acadica</i> ,	<i>Melospiza cinerea melodia</i> ,
<i>Otus asio</i> ,	? <i>Cardinalis cardinalis</i> ,
<i>Asio magellanicus virginianus</i> ,	<i>Ampelis cedrorum</i> ,
<i>Dryobates villosus</i> ,	<i>Sitta carolinensis</i> ,
<i>Dryobates pubescens medianus</i> ,	<i>Parus atricapillus</i> .

Eighty-eight species may be placed in the list of summer residents, and doubtless some listed as transients belong here also, as the locality is well within their known breeding range. On the other hand there

are a number, preceded by an asterisk in the subjoined list, which are far more common and characteristic during the migrations than in the breeding season. Such species as occur occasionally in winter are marked with a dagger, while several, as to whose breeding here there is still some doubt, are appropriately designated. They are :

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| * <i>Merganser serrator</i> , | <i>Tyrannus tyrannus</i> , |
| <i>Aix sponsa</i> , | <i>Myiarchus crinitus</i> , |
| <i>Botaurus lentiginosus</i> , | <i>Sayornis phæbe</i> , |
| <i>Ardetta exilis</i> , | <i>Horizopus virens</i> , |
| <i>Butorides virescens</i> , | <i>Empidonax virescens</i> , |
| ? <i>Nycticorax nycticorax nævius</i> , | <i>Empidonax minimus</i> , |
| * <i>Rallus virginianus</i> , | † <i>Corvus brachyrhynchus</i> , |
| <i>Porzana carolina</i> , | <i>Dolichonyx oryzivorus</i> , |
| <i>Philohela minor</i> , | <i>Molothrus ater</i> , |
| * <i>Gallinago delicata</i> , | <i>Agelaius phæniceus</i> , |
| * <i>Helodromas solitarius</i> , | † <i>Sturnella magna</i> , |
| <i>Bartramia longicauda</i> , | <i>Icterus spurius</i> , |
| <i>Actitis macularia</i> , | <i>Icterus galbula</i> , |
| <i>Oxyechus vociferus</i> , | <i>Quiscalus quiscula æneus</i> , |
| <i>Ægialitis meloda circumcincta</i> , | <i>Carpodacus purpureus</i> , |
| ? <i>Ectopistes migratorius</i> , | <i>Poocetes gramineus</i> , |
| † <i>Zenaidura macroura</i> , | ? <i>Passerculus sandwichensis sav-</i> |
| <i>Circus hudsonius</i> , | <i>anna</i> , |
| ? <i>Accipiter velox</i> , | <i>Coturniculus savannarum pas-</i> |
| ? <i>Accipiter cooperii</i> , | <i>serinus</i> , |
| <i>Buteo borealis</i> , | <i>Spizella socialis</i> , |
| <i>Buteo lineatus</i> , | <i>Spizella pusilla</i> , |
| ? <i>Buteo platypterus</i> , | <i>Melospiza georgiana</i> , |
| <i>Haliaetus leucocephalus</i> , | <i>Pipilo erythrophthalmus</i> , |
| <i>Falco sparverius</i> , | <i>Zamelodia ludoviciana</i> , |
| <i>Coccyzus americanus</i> , | <i>Cyanospiza cyanea</i> , |
| <i>Coccyzus erythrophthalmus</i> , | <i>Spiza americana</i> , |
| † <i>Ceryle alcyon</i> , | <i>Piranga erythromelas</i> , |
| † <i>Melanerpes erythrocephalus</i> , | <i>Progne subis</i> , |
| † <i>Colaptes auratus</i> , | <i>Petrochelidon lunifrons</i> , |
| <i>Anthus vociferus</i> , | <i>Hirundo erythrogaster</i> , |
| <i>Chordeiles virginianus</i> , | * <i>Iridoprocne bicolor</i> , |
| <i>Chætura pelagica</i> , | <i>Riparia riparia</i> , |
| <i>Trochilus colubris</i> , | ? <i>Stelgidopteryx serripennis</i> , |

<i>Lanius ludovicianus migrans,</i>	<i>Wilsonia mitrata,</i>
<i>Vireo olivaceus,</i>	<i>Setophaga ruticilla,</i>
<i>Vireo gilvus,</i>	<i>Galeoscoptes carolinensis,</i>
<i>Vireo flavifrons,</i>	<i>Toxostoma rufum,</i>
<i>Mniotilta varia,</i>	<i>Troglodytes aëdon,</i>
? <i>Compsothlypis americana,</i>	? <i>Cistothorus stellaris,</i>
<i>Dendroica æstiva,</i>	<i>Telmatodytes palustris,</i>
<i>Dendroica pensylvanica,</i>	<i>Hylocichla mustelina,</i>
<i>Seiurus aurocapillus,</i>	<i>Hylocichla fuscescens,</i>
<i>Geothlypis trichas brachidactyla,</i>	† <i>Merula migratoria,</i>
<i>Icteria virens,</i>	<i>Sialia sialis.</i>

The winter visitants number at least twenty-five species, some (*) of which, however, are much more numerous during the season of migration, while others (†) have not yet been actually found throughout the entire cold season, although their occurrence is in every way probable. They are as follows:

<i>Larus argentatus,</i>	<i>Pinicola enucleator leucura,</i>
* <i>Aythya vallisneria,</i>	<i>Loxia leucoptera,</i>
* <i>Fuligula marila,</i>	<i>Acanthis linaria,</i>
<i>Clangula clangula americana,</i>	† <i>Acanthis linaria rostrata,</i>
<i>Oidemia deglandi,</i>	† <i>Spinus pinus,</i>
<i>Oidemia perspicillata,</i>	<i>Passerina nivalis,</i>
† <i>Accipiter atricapillus,</i>	* <i>Calcarius lapponicus,</i>
† <i>Archibuteo lagopus sancti-johannis,</i>	<i>Spizella monticola,</i>
	* <i>Junco hyemalis,</i>
† <i>Scotiaptex nebulosa,</i>	<i>Lanius borealis,</i>
<i>Nyctea nyctea,</i>	† <i>Dendroica coronata,</i>
<i>Otocoris alpestris,</i>	* <i>Olbiorchilus hiemalis,</i>
<i>Hesperiphona vespertina,</i>	† <i>Regulus satrapa.</i>

This gives a total of one hundred and six species for the breeding season and forty-three for the winter. To these are to be added ninety-five species best classed as transient visitants, although some of them, indicated by an asterisk, possibly breed occasionally, while others, marked by a dagger, are apt to occur in the winter season also.

† <i>Colymbus holboëllii,</i>	<i>Gavia lumme,</i>
† <i>Colymbus auritus,</i>	<i>Larus delawarensis,</i>
<i>Podilymbus podiceps,</i>	† <i>Larus philadelphia,</i>
<i>Gavia imber,</i>	<i>Sterna caspia,</i>

- Sterna hirundo*,
Hydrochelidon nigra surinamensis,
Phalacrocorax dilophus,
Merganser americanus,
Lophodytes cucullatus,
 * *Anas boschas*,
 † *Anas obscura*,
Chaulelasmus streperus,
Mareca americana,
Nettion carolinensis,
Querquedula discors,
Spatula clypeata,
Dafila acuta,
 † *Aythya americana*,
 † *Fuligula affinis*,
Fuligula collaris,
Charitonetta albeola,
 † *Harelda hyemalis*,
 † *Oidemia americana*,
Erismatura jamaicensis,
Branta canadensis,
Olor columbianus,
Ardea herodias,
Rallus elegans,
Porzana noveboracensis,
Gallinula galeata,
Fulica americana,
Crymophilus fulicarius,
Phalaropus lobatus,
Steganopus tricolor,
Macrorhamphus griseus,
Micropalama himantopus,
Tringa canutus,
Arquatella maritima,
Actodromas maculata,
Actodromas fuscicollis,
Actodromas bairdii,
Actodromas minutilla,
Pelidna alpina sakhalina,
Ercunetes pusillus,
Calidris arenaria,
Totanus melanoleucus,
Totanus flavipes,
Numenius hudsonicus,
Numenius borealis,
Squatarola squatarola,
Charadrius dominicus,
Ægialitis semipalmata,
Arenaria morinella,
Falco columbarius,
 * *Pandion haliaëtus carolinensis*,
 * *Nyctalops accipitrinus*,
Sphyrapicus varius,
Nuttallornis borealis,
Empidonax flaviventris,
Empidonax traillii alnorum,
Euphagus carolinus,
Ammodramus nelsoni,
Zonotrichia leucophrys,
Zonotrichia albicollis,
Passerella iliaca,
Vireo philadelphicus,
Vireo solitarius,
Helminthophila rubricapilla,
Helminthophila celata,
Helminthophila peregrina,
Dendroica tigrina,
Dendroica caerulescens,
 * *Dendroica maculosa*,
Dendroica castanea,
Dendroica striata,
Dendroica blackburnie,
 * *Dendroica virens*,
Dendroica vigorsii,
Dendroica palmarum,
Seiurus noveboracensis,
Geothlypis agilis,

<i>Geothlypis philadelphia,</i>	<i>Sitta canadensis,</i>
<i>Wilsonia pusilla,</i>	<i>Regulus calendula,</i>
<i>Wilsonia canadensis,</i>	<i>Hylocichla aliciae,</i>
<i>Anthus pensilvanicus,</i>	<i>Hylocichla ustulata swainsonii,</i>
† <i>Certhia familiaris americana,</i>	<i>Hylocichla guttata pallasii.</i>

There remain eleven species which it is perhaps best, on the whole, to assign to the class of accidental visitants, at least for the present :

<i>Uria lomvia,</i>	<i>Corvus corax principalis,</i>
<i>Stercorarius parasiticus,</i>	<i>Xanthocephalus xanthocephalus,</i>
<i>Rissa tridactyla,</i>	<i>Thryothorus ludovicianus,</i>
<i>Pelecanus erythrorhynchos,</i>	<i>Baeolophus bicolor,</i>
<i>Somateria spectabilis,</i>	<i>Poliophtila caerulea.</i>
<i>Symphemia semipalmata,</i>	

Among the one hundred and six species known or believed to breed in this locality there are none strictly referable to the Canadian Fauna, and but seven, *Centurus carolinus*, *Empidonax virescens*, *Cardinalis cardinalis*, *Spiza americana*, *Stelgidopteryx serripennis*, *Icteria virens*, and *Wilsonia mitrata*, which are Carolinian in their faunal affinities, and it is to be further noted that of these only two, *Empidonax virescens* and *Wilsonia mitrata*, appear to be at all common and regular during the breeding season. With these exceptions the species which are of value in predicating the faunal position of the locality are all more or less characteristic of the Alleghanian Fauna, either in their northward or southward dispersion in the breeding season. The local species which in their breeding range to the southward are limited to the Alleghanian Fauna are *Merganser serrator*, *Rallus virginianus*, *Porzana carolina*, *Agialitis meloda circumcincta*, *Empidonax minimus*, *Dolichonyx oryzivorus*, *Carpodacus purpureus*, *Passerculus sandwichensis savanna*, *Melospiza georgiana*, *Zamelodia ludoviciana*, *Iridoprocne bicolor*, *Dendroica pensylvanica*, and *Hylocichla fuscescens*. The region under consideration may safely be considered as included within the Alleghanian Fauna, although with a slight admixture of the Carolinian element. It is to be regretted that a more extended study has not been made of the birds of the lake shore plain, as it would be interesting to know to what extent and why its avifauna differs from that of the north shore of Lake Erie, which is considered to be Carolinian in character throughout, and to carry that life-zone into western New York.

The area covered by the present paper comprises, besides the Peninsula and Presque Isle Bay, the lake shore plain and its environs within about four miles of the city of Erie. For the sake of completeness a few notes referring to other (Pennsylvania) localities on the lake have been included, as specifically stated under the head of the various species involved.

LIST OF SPECIES.

1. **Colymbus holboëllii.** HOLBELL'S GREBE; RED-NECKED GREBE.

A transient visitant, possibly also a winter resident, apparently of rare occurrence. A single female was shot November 17, 1900, in the channel near the Life-saving Station, and kindly presented to us by Mr. Frank Claus. In this specimen the red area of the throat was plainly indicated, the color being obscured by white—the mark of an adult bird. On November 26 a second specimen was secured by Mr. Claus, and on October 27, 1901, one was shot by a local gunner, both of which were immature birds, and are now in the Carnegie Museum. The most recent record refers to a pair taken February 13, 1904, at the mouth of Mill Creek, which specimens are also preserved in the Carnegie Museum.

2. **Colymbus auritus.** HORNED GREBE.

A regular migrant, quite common in the spring, and fairly abundant in the fall. At the former season (in 1900) it was first recorded on March 27, and none were noted after April 17. As a rule it was found in small parties, although on one occasion (April 2) a compact flock of a dozen was observed, which took wing upon pursuit in preference to attempting escape by diving, as is usual. Male specimens secured near the time of the vernal departure of the species were in almost perfect breeding dress, but those taken earlier in the season showed a considerable admixture of the light-colored feathers of the winter plumage. In the fall the earliest record was for October 23, when a small number were observed on the main lake, and from this time until our departure it was noted almost daily, occasionally off the outside beach, but most frequently on Erie Bay, and particularly Misery Bay, the sheltered situation of which offered peculiar attractions. There were days in November when from ten to twenty individuals could be counted at once, although they never drew together into a compact flock, and in their movements when feeding or when pursued seemed to be entirely independent of one another. At this

time of the year the birds were by no means shy, and were easily approached. Specimens in Mr. Sennett's collection taken October 22, 1875, and October 29, 1889, tend to confirm the date of arrival recorded by us in 1900. Regarding its time of departure, Mr. Bacon states that it remains until the bay freezes over (December 8, 1894; December 9, 1900), but ordinarily does not winter. One specimen shot January 10, 1901, and an emaciated specimen captured near a farmhouse, February 6, 1904, constitute exceptional records. The latest date in the spring migration appears to be April 24, 1902, when the species was recorded by Mr. Simpson. In former years it may even have bred in this locality, as it is known to do now at the St. Clair Flats, and formerly in northern Ohio, as recorded by Audubon (*Ornithological Biography*, III., 1835, 431) and Dr. F. W. Langdon (*Journal Cincinnati Society of Natural History*, III., 1880, 230).

3. *Podilymbus podiceps*. PIED-BILLED GREBE.

The present species, like the last, occurs only as a migrant in the spring and fall. Although reported to be regular in its appearance at the former season, it was apparently not common in the spring of 1900, having been noted on but three occasions — April 16, when a flock of five was seen in Big Pond, two of which were secured; April 17, when a few more were observed in the same pond; and April 23, when a single specimen was shot, also at the same place. Although the conditions are seemingly as favorable for the species nesting here as at other points along the shore of Lake Erie (*cf.* Langdon, *Journal Cincinnati Society of Natural History*, III., 1880, 231), diligent and repeated search in May failed to disclose the presence of even a single individual, nor has Mr. Bacon ever found it in the breeding season. However, he notes that it is among the first of the waterfowl to arrive in the fall, coming in August (August 26, 1892; August 8, 1903). In 1900 it was recorded in the fall migration as early as August 27, and may have been present previous to that date. A bird secured September 4 was in full summer plumage, but all others taken at this season were in winter or immature dress. The species seemed to increase in numbers up to the last week in September, when it was exceedingly abundant, not only in the various ponds, but also on the shallow parts of the bay, wherever there was an abundant growth of aquatic plants. While numbers were often seen together, it would appear that their association was the result of a common interest rather than of

a truly gregarious disposition. Unlike the Horned Grebe, none were seen on the main lake, while on the other hand none of that species were found in the ponds. At this time the birds were by no means shy, and being so constantly in evidence were the source of some trouble to the observer looking for other species. A decrease in their numbers was noticeable through October, becoming more marked as the Horned Grebe increased in abundance, while the last record was made on November 14, although the probabilities favor a somewhat later date as the actual time of final departure.

4. *Gavia imber*. LOON.

"A few of these birds are seen on the bay every spring and fall, but they are never common. I observed one individual as late as May 31 (1896), while September 25 (1894) is my earliest fall record" (Bacon). Mr. Simpson reports the species as having been observed in April and November of 1902 and 1903, and notes that a specimen, still in winter plumage, was shot at Crystal Point on April 25, 1902. Curiously enough, no Loons were seen in the spring of 1900 until May 4, when two individuals were observed flying over the bay together. In the fall the species was more numerous, arriving October 6, and was noted at intervals during that month and the next, single birds being recorded from the bay or lake. On November 12 a gunner picked up a Loon on the shore of Misery Bay near our houseboat, and brought it to us alive. It was practically helpless on the flat surface, but quite vicious, striking savagely with its powerful beak when teased, and uttering its peculiar reverberating cry. Upon skinning it proved to have been wounded and partially disabled. The last record was made on November 18, when one was seen on Misery Bay off Crystal Point, and watched for some time while feeding. It doubtless remains as long as there is open water in the bay. Occasionally one is caught in the fishermen's nets. A fine specimen in the Carnegie Museum, dated April 25, 1903, was taken in this way.

[*Gavia arctica*. BLACK-THROATED LOON.

Given by Mr. Lynds Jones (*Birds of Ohio*, 1903, 26) as a casual winter visitor in Ohio, where a number of specimens have been taken since that recorded by Dr. J. M. Wheaton, which was captured near Kelley's Island instead of on Sandusky Bay. This is a boreal species, seldom reaching the United States in its winter dispersion.]

5. *Gavia lumme*. RED-THROATED LOON.

Although Dr. Warren states (*Birds of Pennsylvania*, 1890, 8), presumably on Mr. Sennett's authority, that "this bird is often met with,

especially late in the autumn," at Erie, the evidence so far at hand does not admit of such a general statement as regards its abundance. It is to be classed as a transient visitant, of casual occurrence in the fall and early spring. In 1900 two specimens in immature dress were secured from local gunners, both shot on Erie Bay, on October 23 and November 19, respectively. A little later, on November 28, a third specimen was captured on the bay by a gunner. On February 16, 1904, three were shot in the channel at the Life-saving Station, and a single bird was killed at the docks on February 25 also, all but one of which are now in the Carnegie Museum. These seven examples are all that are certainly known from this locality.

6. *Uria lomvia*. BRÜNNICH'S MURRE.

The month of December, 1896, was memorable for the appearance of this maritime species at many points far inland, as far west as Michigan and Indiana. The flight seems to have followed the basin of the Great Lakes, along which there are numerous records. Thus, specimens have been recorded from near Sandusky and Painesville, Ohio (Butler, *Auk*, XIV., 1897, 197-198; *id.*, *Birds of Indiana*, 1897, 566), taken December 19. With these occurrences the Erie records, here published for the first time, are in close accord. Mr. Bacon states that several were shot on the bay in December, 1896, and although he quotes no dates, the time of their capture is fairly well indicated by a specimen (labeled a female) in Mr. James Thompson's possession that is marked "December 18, 1896," by the party who mounted it. At least one other specimen from this flight was mounted by a local taxidermist, which bird is now in the Carnegie Museum. The species was not met with again until November 20, 1899, when a single bird was killed on the bay by a gunner, this specimen also eventually coming to the Carnegie Museum. In 1900 specimens were taken by gunners on November 27 and December 2, from which flight two specimens are known to have been preserved, one now in Mr. Bacon's collection, and the other in that of the Carnegie Museum. All the gunners who have met with birds of this species agree in stating that they were easily approached and killed.

[*Stercorarius pomarinus*. POMARINE JAEGER.

Of casual occurrence on Lake Erie, there being records for Cleveland (Wheaton, *Birds of Ohio*, 1882, 546), Sandusky (Cook, *Birds of Michigan*, 1893, 27), and Lorain (Jones, *Birds of Ohio*, 1903, 27).]

7. *Stercorarius parasiticus*. PARASITIC JAEGER.

An accidental visitant, of whose occurrence there is but one authentic record. This depends upon a specimen in Mr. Sennett's collection taken at the head of Erie Bay, October 15, 1874, by Mr. Merrick Low. Mr. Sennett's catalogue notes with reference to this specimen: "Bird very poor and quite exhausted. None ever noticed there before." Of interest in this connection there may be noted a few more recent records, from Lorain and Sandusky Bay, Ohio (Jones, *Birds of Ohio*, 1903, 27; Comstock, *Auk*, XIII., 1896, 171).

8. *Rissa tridactyla*. KITTIWAKE GULL.

Mr. Worthington, who is very familiar with this species elsewhere, saw and positively identified a single individual off the outside beach on October 17, 1900, but was unable to secure it. Dr. J. M. Wheaton states (*Birds of Ohio*, 1882, 550) that it is a "Very rare or accidental winter visitor on Lake Erie. Mr. Winslow notes the occurrence of three specimens in Cleveland harbor many years since." Future investigation, however, may perhaps show that this species is at least sparingly represented every winter on the lake, as indicated in the A. O. U. Check-List: "south in eastern North America in winter to the Great Lakes."

[*Larus glaucus*. GLAUCOUS GULL.]

This large gull is to be looked for in winter. There are records from the Niagara River near Buffalo, January 29, 1895 (Savage, *Auk*, XII., 1895, 312), and from Indiana (Butler, *Birds of Indiana*, 1897, 570) and Michigan (Cook, *Birds of Michigan*, 1893, 27.)

Larus leucopterus. ICELAND GULL.

Another northern species, the casual occurrence of which in the winter may be expected, judging from the number of extralimital records. Dr. J. M. Wheaton (*Birds of Ohio*, 1882, 547), gives it as a "Rare winter visitor on Lake Erie. Mr. Winslow states that two or three specimens have been taken in Cleveland harbor." Mr. Lynds Jones mentions a specimen from Lorain, December 22, 1888 (*Birds of Ohio*, 1903, 28). Mr. E. W. Nelson (*Bulletin Essex Institute*, VIII., 1876, 145) considers it a "regular and not uncommon winter resident on Lake Michigan."

Larus marinus. GREAT BLACK-BACKED GULL.

In September, 1900, the writer repeatedly saw a single gull along the outside beach which is believed to have been of this species. It was so wary, however, that in no case could it be approached near enough to positively identify it. Moreover, this gull has been described by fishermen as being met with in early winter far out on the lake, where the tugs go to set the nets, and there would seem to be no reason to doubt the identification, inasmuch as there are numerous records for such near-by localities as Buffalo (Savage, *Auk*, XII., 1895, 312), and Cleveland (Wheaton, *Birds of Ohio*, 1882, 547).]

9. *Larus argentatus*. HERRING GULL.

This gull is a regular winter resident in the vicinity of Erie, and it is certainly an abundant species during the migrations. A flock of a dozen individuals was observed March 21, 1900, at the mouth of Mill Creek, feeding in the only open water at that time on the bay. Before the end of the month their numbers had largely increased, but through April gradually diminished, although the last individual to be recorded was noted as late as May 12. At this season the species was usually found in scattered companies, rarely exceeding a dozen individuals, feeding in the waters of the bay or resting on the edge of the ice. A large proportion of the birds occurring early in the spring were adults, but with the advance of the season these became scarcer and scarcer, and all the later records were of gray birds. There is a specimen in Mr. Sennett's collection taken as late as May 16, 1875, and Mr. Bacon states that he has often seen them on the open lake in summer, although they seem never to frequent the harbor at that season. He is inclined to think that they may breed on the Canadian shore of Lake Erie, but while such may have been the case many years ago, there would seem to be no recent records to justify such a supposition. The probabilities are that the birds seen in summer are non-breeding and immature individuals, which have failed to follow the bulk of the species to their usual nesting-grounds. In the fall of 1900 a single bird was seen on August 22, and what was presumably the same individual was noted at intervals up to September 6. The following day three were seen, and on September 12, after a stormy night, the species had become abundant, and so remained until the date of our departure in November. Both young and old appeared together at this time, when the former far outnumbered the latter. Although commonly found on the bay, immense flocks frequented the open lake as well, standing in more or less close order on the sandy outside shore, flying out to alight on the water when disturbed. They were at all times shy, but once or twice, during heavy storms, it became possible to approach within gunshot. They were accustomed to follow in the wake of the numerous fishing tugs as they came into the harbor with their catch of fish, ready to pick up what was thrown overboard. None were ever seen in the ponds, although often they were observed soaring high over the Peninsula, on their way between the bay and lake. Mr. Bacon's experience has been much the same. He states that on April 25 and 26, 1901, he noted a pair about a pond in the fields, and has once or twice in

the spring seen several high in the air, flying over the mainland towards the lake, evidently migrating; otherwise he has never observed them away from the lake and bay. In a series of ten specimens secured during the spring and fall of 1900 only one was in fully adult plumage.

10. **Larus delawarensis.** RING-BILLED GULL.

The Ring-billed Gull may occur through the winter, but it was recorded by us as a migrant only, not noticed in the spring, but moderately common in the fall, from October 17 until November 15. Scattering individuals were frequently noticed on both Lake Erie and Misery Bay, sometimes alone, but more often associated with Herring or Bonaparte's Gulls. They were not particularly shy, and on November 4, when they were especially abundant, kept flying over our duck decoys and near the blinds with utter fearlessness. It so happened, however, that no specimens were secured. Mr. Bacon seems not to have met with this bird in life, but Mr. Simpson contributes the following notes: "On April 26, 1902, during a terrific northwest blow that brought on an immense flight of Bonaparte's Gulls, two birds of this species [the Ring-billed Gull] were noted off Crystal Point, one of which I was so fortunate as to secure. From November 17 to 23, 1902, this gull, together with the Herring and Bonaparte's Gulls was quite common off the outside beach during the strong east winds which prevailed at that time, and by persistent effort I was able to secure six specimens, all in the spotted plumage of the immature bird. Two adults were noted, one of which was wounded off Crystal Point, but not secured. Again, on November 24, 1903, a few of this species were seen, associated with the Herring Gulls." Two of the specimens alluded to above, taken respectively on November 22 and 23, 1902, are now in the Carnegie Museum.

11. **Larus philadelphia.** BONAPARTE'S GULL.

This species occurs as a common transient in spring and fall, being most numerous at the former season, according to the testimony at hand. Our experience with this gull in the spring of 1900 was that it was usually found in loose flocks of from twenty to a hundred individuals, coursing up and down the bay, feeding, or occasionally on the outside beach, resting on a sand-bar. However, on the few comparatively calm days during the season more or less compact flocks were met with resting on the smooth water, their light color rendering them conspicuous at a long distance. At such times it was difficult or impossible to approach within range, and far better chances of securing specimens were afforded

by remaining quietly in the boat as the birds came by on their course and picking off such as ventured too close. A single bird flung out as a decoy would almost always bring others within reach, and on one occasion the cries of a wounded bird brought an entire flock headed *en masse* towards the sound. The first individuals were seen on April 13, and the following day a large flock was observed. Practically all of the birds met with thus early in the season were in full adult plumage, with the black hood complete, but towards the latter part of April and during May immature birds were almost exclusively observed. The last were recorded on May 12, but Mr. Bacon has noted them somewhat later—May 15, 1901, May 25, 1895. Our recorded date of arrival in 1900, as well as Mr. Simpson's in 1903 (April 13) may possibly be a little early, since Mr. Bacon's notes give April 26 and 24 as the dates of first appearance in 1892 and 1894 respectively, while there is a specimen in Mr. Sennett's collection taken April 23, 1875. Mr. Bacon has also recorded the species in the fall movement as early as August 13 (1902) and 20 (1890), but he adds that it does not generally arrive until the first week in September, remaining into November, while he has even once or twice seen an individual during the winter months—a statement borne out in some measure by Dr. Warren, who says (*Birds of Pennsylvania*, 1890, 16) that he "observed a flock of a dozen or more of these gulls in company with two or three Herring Gulls late in the month of December, 1889." Although observed in August by Mr. Bacon, as above stated, and, although a specimen in Mr. Sennett's collection was taken as early as September 22 (1875), it was not until October 29 that we noted its return in the fall of 1900. By November 1 the birds were common, being seen almost daily thereafter until November 17, and no doubt remaining still later. They were more frequently observed on the main lake at this season, but were scarcely so abundant as in the spring.

[*Xema sabinii*. SABINE'S GULL.

"Accidental in winter on Lake Erie. Mr. Winslow informs me that he took an immature bird of this species in Cleveland harbor many years since." (Wheaton, *Birds of Ohio*, 1882, 552.)

[*Gelochelidon nilotica*. GULL-BILLED TERN.

"Rare visitor in the vicinity of Cleveland, where taken by Mr. Winslow." (Wheaton, *Birds of Ohio*, 1882, 553.) It is recorded as breeding at the St. Clair Flats on the authority of Mr. Adolphe B. Covert, and as 'often common on Lake Erie' (in Michigan) on the authority of Mr. Jerome Trombley, (Cook, *Birds of Michigan*, 1893, 29).]

12. *Sterna caspia*. CASPIAN TERN.

This large tern was rather common during the fall migration of 1900, from September 4 until October 3. Although occasionally met with by itself, singly, or in small companies, it was more frequently found associated with the Herring Gull, both on the bay and lake, and like that species was rather shy. The large flock of gulls on the outside beach included a number of Caspian Terns, which could easily be distinguished, if adults, by their bright red bills. The adults had a harsh, rasping cry, which was very distinctive, while the note of the immature birds was more musical. Two specimens, an adult and a young one, were secured by us, both on the outside beach, and Mr. Simpson also shot two birds on September 17. There is a single specimen (September 15, 1888) in Mr. Sennett's collection, and Mr. Bacon has observed the species as a regular visitant in September and October, although he has never seen more than ten or twelve in any one season. An immature bird taken October 6, 1892, and an adult and young, taken September 21, 1901, by Mr. Bacon, are in the Carnegie Museum. The only spring record appears to be that of Mr. Simpson, who notes that "during the terrific 'northwester' of April 26, 1902, I saw three on Misery Bay in the company of Common Terns and Bonaparte's Gulls."

[*Sterna forsteri*. FORSTER'S TERN.]

Careful search was made for this tern in the spring and fall of 1900, but none were identified, although the species, being more a bird of the interior than *Sterna hirundo*, would naturally be expected to occur. The nearest locality (on the Great Lakes) from which it is reported appears to be the St. Clair Flats, (Cook, *Birds of Michigan*, 1893, 29).]

13. *Sterna hirundo*. COMMON TERN.

A regular transient, abundant in the spring, and fairly common in the fall. It has been recorded as early in the spring as April 26 (1902) by Mr. Simpson, but in 1900 we did not meet with it until May 7, when a few were observed with the Bonaparte's Gulls on the bay, and at least fifty individuals were seen in a flock by themselves. For about two weeks thereafter they were very common indeed, and a number were noted as late as May 29. While the Bonaparte's Gulls remained the terns were frequently found in their company, and both could be decoyed by throwing over a dead bird and imitating their cry. When shot at the terns presently mounted high in the air above their dead companions, while the gulls dispersed or passed on. Later

in the season the terns were often found scattered over the bay resting by preference on pieces of floating driftwood. While there is no present intimation that this species ever bred in the immediate vicinity of Erie, such may readily have been the case in former years, before the city had grown to any size. Mr. Bacon states that as a rule none are seen after May 25, although in 1903 he saw a single individual on June 15, and a pair on June 4, 1904. The nearest point where the Common Tern is actually known to nest would appear to be Big Chicken Island, off Put-in-Bay, Ohio, where Mr. E. B. Williamson of Bluffton, Indiana, in a letter to the writer dated February 14, 1901, states that he collected numerous sets of their eggs on June 30, 1896. The probabilities are that the terns found at Erie breed to the northeast, on Lake Ontario and the Saint Lawrence. For the return movement August 8 (1903) is the earliest recorded appearance, but this is exceptional, according to Mr. Bacon's experience. Thus, we did not meet with it in the fall of 1900 until August 28, when a flock of about thirty was noticed on the bay. It was found in greater or less numbers from that date until September 26, but no very large flocks, such as were met with in the spring, were observed. At this season it frequented the main lake as well as Erie Bay, and was often found associated with the Black Tern during the period of abundance of the latter species.

[*Sterna dougalli*. ROSEATE TERN.

A maritime species of only casual occurrence in the interior. Dr. J. M. Wheaton includes it as a bird of Lake Erie in Ohio on the authority of Mr. Winslow (*Birds of Ohio*, 1882, 562).

Sterna antillarum. LEAST TERN.

'Certainly breeds at St. Clair Flats,' according to Dr. W. C. Brownell (Cook, *Birds of Michigan*, 1893, 30), and, if so, it may stray eastward along Lake Erie.]

14. *Hydrochelidon nigra surinamensis*. BLACK TERN.

Dr. Warren states (*Birds of Pennsylvania*, 1890, 23) that "Dr. John W. Detwiller . . . writes me, that, some years ago he 'procured eggs of the Black Tern upon drift-wood on Lake Erie, near Erie city.' . . . I am not aware that they are now known to breed anywhere in the neighborhood of Erie county or elsewhere in our state." While there is nothing intrinsically improbable in the breeding of the Black Tern here in former years, as, indeed, it does today (or at least as recently as 1896, as the writer is informed by Mr. E. B. Williamson), near Sandusky, Ohio, it has been shown that the late Dr. Detwiller was an

utterly unreliable observer, and all of his published records are thus open to doubt. Dr. Warren goes on to state that "Mr. George B. Sennett . . . has observed the Black Tern in the vicinity of Erie city only during the spring and fall," and to support this statement there are a pair of birds in Mr. Sennett's collection taken September 23, 1875. The only definite spring record available refers to an individual in full breeding dress seen on the bay April 27, 1902, by Mr. Simpson. Mr. Bacon has never met with the species save in September, 1900, so that in its occurrence even as a fall transient it would seem to be irregular. The writer found it very common at the St. Clair Flats and along the Detroit River late in August, 1903, and it is singular that in its migrations it should not regularly extend to the eastward along Lake Erie. Our notes on its occurrence in 1900 are presented herewith. Several small flocks were seen on the main lake September 12, after the most severe storm of the season. On September 15 two were seen on the bay, one of which was secured. On the evening of September 16 the species suddenly became very prominent on the bay about Crystal Point, and on the following day, which dawned stormy and threatening, with frequent gusts of rain and a strong northwest wind, it was exceedingly abundant, swarming on both the bay and lake, far outnumbering the Common Terns, which were flying at the same time. The birds were perfectly tame, silent, and very fearless, repeatedly coming within a yard of the observer in their flight. They would beat up against the wind for a distance and then drift down before it, occasionally stopping over the water to pick up food, and on the outside beach flying over the land and the ponds back of the shore, without discrimination. Individuals in the postnuptial moult, showing a black and white spotted plumage, occurred with the birds in immature and full winter dress in the proportion of about one to one hundred. The day after this great flight comparatively few birds were seen, and these mainly on Erie Bay alone. Such were almost always more or less closely associated with Common Terns, and like them were often found resting on pieces of floating driftwood. The last was recorded September 24.

15. **Phalacrocorax dilophus.** DOUBLE-CRESTED CORMORANT.

The notes on this species would indicate that it occurs sparingly, but regularly, as a transient in late fall and early winter. Dr. Warren so gives it on the authority of Messrs. George B. Sennett and James Thompson, and mentions a specimen shot by the latter on October

26, 1889, from which "a fish, known locally as 'buffalo-sucker,' measuring between eight and nine inches in length was taken." (*Birds of Pennsylvania*, 1890, 28-29.) There is one specimen in Mr. Sennett's collection, dated November 15, 1889. Mr. Bacon has never heard of it in the spring, but has occasionally seen one in the fall, in every case on the wing, although, he adds, "The fishermen inform me that the birds when present often alight on the pond-net stakes. On December 14, 1901, a party of four birds of this species flew over me as I was passing down the neck of the Peninsula, one of which I secured. When skinned its throat was found to contain two ten-inch perch, one of which was perfectly fresh. I have seen single cormorants on the following dates also: October 7, 1897, December 1, 1900, and November 8, 1901, while I secured from a local gunner a bird which had been taken November 6, 1902." Both specimens to whose capture reference is made are now in the Carnegie Museum. Part of a skeleton, with the entire tail attached, was found on the shore of Misery Bay in the spring of 1900, evidently belonging to a bird killed the previous fall. The only living bird of this species noted by us was seen off the outside beach on October 9.

[*Phalacrocorax dilophus floridanus*. FLORIDA CORMORANT.

This form may in former years have extended as far north as Erie, and may even have bred. Compare, in this connection, the statement of Dr. F. W. Langdon (*Journal Cincinnati Society of Natural History*, III., 1880, 229) that two specimens, male and female, were taken by Mr. J. B. Porter, in June, 1878, near Port Clinton, Sandusky Bay, Ohio.]

16. *Pelecanus erythrorhynchos*. WHITE PELICAN.

The claim of this species to a place in the present list rests on the following statement, which is quoted from Dr. Warren (*Birds of Pennsylvania*, 1890, 29-30): "Mr. George B. Sennett, of Erie, informs me a few of these birds were seen, about fifteen or twenty years ago [*i. e.*, between 1870 and 1875], in the neighborhood of Erie city." Numerous well attested records for this species from contiguous areas would seem to justify the reception of the above statement at its face value.

17. *Merganser americanus*. AMERICAN MERGANSER.

This merganser is not very common or well known to the local gunners. It occurs as a transient visitant, and may possibly remain through the winter. One was seen with a flock of Red-breasted Mergansers in Yellow Bass Pond on April 7, this being our only spring

record for 1900. In the fall the first, a young male, was shot at Crystal Point on November 8. A male in incomplete adult plumage was killed over decoys in Horseshoe Pond the following day, and on November 12 two females were shot at Crystal Point. There were also examined a few adults in the possession of a gunner who had shot them on November 17, which was the last date opportunity was afforded to record, but in Mr. Bacon's notes mention is made of a freshly killed bird seen by him on December 8 of the same year. Again in 1903, on a brief visit to the Peninsula, the writer saw a single bird in possession of a gunner, said to have been killed on December 7. All the specimens preserved by us were excessively fat.

18. **Merganser serrator.** RED-BREASTED MERGANSER.

With the single exception of the Lesser Scaup Duck, the present species, known to the local gunners as "Fish Duck," is the commonest of the *Anatidae* during the season of migration, both in spring and fall. Although doubtless present previously, the first record in 1900 was made March 27, and it was common throughout April and for a few days in May, while a flock of stragglers was observed as late even as May 25. Thus its period of migration at this place extended over almost two months. Although single individuals and small parties were often met with, it was usually found in larger flocks on the bay, being detected but once in the ponds. In the fall it was first noted on October 17, soon becoming numerous, and thus continued up to the time of our departure. At this season it was one of the few ducks that frequented the lake proper, and there were occasions when a number of flocks were visible at one time from the outside beach. It was also one of the species which was readily decoyed, and was thus the source of much annoyance to gunners who were in quest of more edible kinds. As a diver it is most expert, and the writer has repeatedly seen an entire flock while engaged in feeding disappear beneath the surface simultaneously. It is said to remain in the fall until the bay freezes over. Mr. Bacon's notes on this merganser are interesting as tending to prove that it occasionally remains through the summer to breed. He says: "I have seen large flocks here as late as May 19 (1900), and on May 30, 1901, I saw a dozen birds. I have several times seen young mergansers on the bay in July and August, and on one occasion (July 27, 1893) I shot one. All of these birds I am quite certain were of this species, although since I have regretted not having made the identification more positive. On September 6, 1900, I killed an old bird of

this species, although it is well into October before the mergansers are expected. Taking all these facts into consideration, I think they breed here occasionally." See, in this connection, Dr. F. W. Langdon's note on this species (*Journal Cincinnati Society of Natural History*, III., 1880, 229), in which he mentions that it has been identified in summer at Sandusky Bay, Ohio, by Mr. J. B. Porter.

19. **Lophodytes cucullatus.** HOODED MERGANSER.

This handsome species is fairly numerous as a transient in spring and fall, preferring the ponds of the Peninsula to the waters of the bay, and is often seen in small pools on the mainland during the spring movement. While fairly common, it is never found in such numbers as the preceding species. The dates of its first appearance in the spring are given by Mr. Bacon as April 7, 1899, and March 25, 1901. In 1900 it was first noted on April 2, when a male bird was picked up dead on the north shore of Erie Bay. Later in the month it was repeatedly recorded, but none were seen after May 2 until May 21, when a belated migrant was observed. In the fall the first record was for November 7, and the last for November 18, although without much doubt it actually remained later. While small flocks and single individuals often came to decoys in the bay, such were as often observed in the ponds, feeding in company with Coots and Pied-billed Grebes, whence the name "Pond Fisher" given by the local gunners. Mr. Bacon writes: "I have often seen them feeding in shallow pools, where they could scarcely find anything in the line of fish, so that I am inclined to think that they may feed on vegetable matter at times. They are claimed by many to be good eating. I have found them both good and bad."

[*"Anas maxima."* (GOSSE, *Birds of Jamaica*, 1847, 399.) MALLARD-MUSCOVY HYBRID.

A specimen of this interesting bird, without doubt a hybrid between the Mallard and the Muscovy (*Cairina moschata*), a tropical American species, which is common in domestication, was taken on the Peninsula near the Life-saving Station on November 25, 1902. The bird was seen flying up and down the bay, and finally alighted on the shore near several men, who captured it by striking it with a club as it started to rise. It seemed to be exhausted. According to Baird, Brewer, and Ridgway (*Water Birds of North America*, I., 1884, 494), "These hybrids are no doubt produced in the barnyard; but it is said that such birds do not inherit the tameness of their progenitors, but revert to the original wildness of both species, and escape by flight. Certain it is, that they are frequently shot by gunners along our coast." The specimen in question, a male, is now in the Carnegie Museum, and may be thus described: Head and neck black, with strong purple iridescence, washed with brown

on the lores, chin, and throat. A broken circlet of white feathers at the base of the neck. Back, scapulars, rump, upper tail coverts, and tail above glossy black, showing rich dark green and violet reflections. Breast rich chestnut, this color also extending in lessening intensity over the sides to the anterior portion of the back, where it appears as a brown wash on the feathers. The chestnut of the breast gradually gives way posteriorly to the grizzled gray color-effect of the abdominal region, which is due to a fine wavy combination of white and black, the latter predominating laterally. Under tail-coverts like the back. Wing-coverts dusky olive-green, the greater ones obsoletely white-tipped, and crossed terminally by a narrow band of black and brown. Primaries dusky black. Speculum iridescent dark purplish green, white-bordered behind. Length (from well made skin), 29 inches; wing, 13; tail, 6.25; bill, 2.40.]

20. **Anas boschas.** MALLARD.

A transient visitant in spring and fall, in some seasons quite abundant, at other times almost rare. As a rule the Black Mallard is more numerous than the present species, but in the fall of 1901 the Mallards outnumbered the others species ten to one, an unprecedented flight having taken place October 17 to 19. The earliest record for the spring migration is February 23, 1891, and other first dates for this season are March 11, 1897, March 8, 1898, and March 2, 1902 (Bacon). In the spring of 1900 it came under our notice first on March 28, when a number were seen resting on the edge of the ice on Erie Bay. This was the only occasion when it was found on the bay, although occasionally it was seen flying over. During April it was seen at frequent intervals in the several ponds of the Peninsula, either alone or in the company of other "pond ducks," particularly the Black Mallard. Early in the season it was usually found in flocks numbering from six to twelve individuals, but during the latter part of its stay it was almost invariably in pairs, each pair by itself, and doubtless mated for the season. May 4 was our latest spring record, and Mr. Bacon notes a pair seen May 5, 1902. Beyond question the Mallard bred at this locality in former years, as stated by Dr. Warren (*Birds of Pennsylvania*, 1890, 35), on the authority of Mr. James Thompson. However, in December, 1902, Mr. Thompson personally informed the writer that it was then more than ten years, to the best of his knowledge and belief, since this species had bred in the neighborhood of Erie. Mr. Bacon has never seen it under such circumstances, although he has noted a single old bird as early as August 24 (1896). It is generally about the middle of September, however, before it reappears in the fall according to the same observer. In 1900 September 21 was the recorded date of arrival, and it was noted at intervals

through the following month, but it was not until November that it became really common, considerably exceeding its spring abundance. Flocks of from ten to twenty birds were found on various occasions in the ponds, and a number of specimens were secured. Curiously enough, all of the individuals in the flocks that we saw seemed to be adult males, and, indeed, the only females recorded in the fall were those which had been killed by local gunners. It was interesting to observe the manœuvres of a flock when seeking a place to alight. They would sweep low over the waters of a pond, then rise and disappear over a wooded ridge half a mile away, returning to repeat the movement until satisfied that the coast was clear, when they would settle in some shallow spot and begin to feed, remaining in one place for hours at a time, if not disturbed. November 14 was the latest date on which an opportunity was given to record the species, although no doubt it remained much later. It was observed by Mr. Simpson from November 17 to 23, 1902, but it is very doubtful if it ever remains through the winter.

21. **Anas obscura.** BLACK MALLARD ; DUSKY DUCK.

This is the most numerous of the "pond ducks," at least in the spring, and occurs as a regular migrant and casual winter resident. Its arrival takes place early in March, and during its sojourn it frequents the ponds on the mainland and Peninsula fully as much as the waters of the bay. In the spring of 1900 the first individuals were observed on the bay on March 31. They were repeatedly noted among the floating ice on the main lake, but the ponds were their usual resting places and feeding resorts. Throughout April they were quite common in such situations, usually in flocks of from five to fifteen individuals, feeding mainly on the seeds of wild rice, with which the gullets and stomachs of the specimens secured were crammed. Towards the end of April it was usual to find these ducks in pairs, apparently mated for the season, and, indeed, it is quite possible that they breed on the Peninsula, although not observed by us later than May 5. On this point Mr. Bacon says: "Although ordinarily not remaining after the first of May (May 2, 1901), I have on different occasions seen a single Black Mallard in the summer months (August 15, 1896 ; June 25, 1900 ; July 19, 1903), but I have never seen a flock of old and young at this time, so I am inclined to think that the species has not bred here of late years. During the fore part of September, (September 13, 1894, September 14, 1895, September 4, 1897, September 5, 1902), it reap-

pears on the return migration, and lingers in small numbers well into the winter, an occasional individual even remaining through the whole season." Our notes for the fall of 1900 were in accord with Mr. Bacon's observations. The first specimen was observed September 7, but they did not become at all numerous until November set in, while the last record was for November 17, although they unquestionably remained considerably later.

[*Anas obscura rubripes*. RED-LEGGED BLACK DUCK.

The occurrence of this form, lately characterized by Mr. William Brewster (*Auk*, XIX., 1902, 184), is to be expected in this locality, but the character of the available material does not permit of a positive statement to that effect. Specimens must be had the labels of which shall note the colors of the soft parts. Mr. Lynds Jones thinks that this is the more common form of the Black Duck in Ohio (*Birds of Ohio*, 1903, 38).]

22. **Chaulelasmus streperus.** GADWALL.

"Although this species is not common in the vicinity of Erie, good-sized flocks are sometimes seen mostly in company with other species about Erie bay, where the Gadwall appears to occur in greater numbers than in other parts of the state." This quotation from Dr. Warren (*Birds of Pennsylvania*, 1890, 37), probably based on information received from Mr. George B. Sennett, however appropriate it may have been at one time, is utterly misleading at present. Nothing is more certain than that the Gadwall is by far the rarest of the ducks at Erie. There is no specimen in Mr. Sennett's collection; Mr. Bacon has never seen or heard of it; we did not meet with it during our stay in 1900, nor did we find any gunner who had recognized it. The only positive record is by Mr. Simpson, who examined a single specimen taken by a gunner November 18, 1902. It was shot over decoys in one of the ponds, and was unfortunately so badly mangled through the stupidity of the gunner that it was unfit for preservation. The species must be listed as a transient visitant.

[*Mareca penelope*. EUROPEAN WIDGEON.

So many records for this bird from neighboring areas have lately come to light that it would seem not unreasonable to look for it at Erie as a casual visitant. The male may readily be distinguished from that of *M. americana* by its rufous-brown head.]

23. **Mareca americana.** AMERICAN WIDGEON.

This duck occurs as a regular migrant in spring and fall, but is not very common at either season. It is confined almost wholly to the ponds, and is usually found in pairs or small flocks, sometimes associated with kindred species, particularly the Black Mallard. Accord-

ing to Mr. Bacon's experience it arrives from the south soon after the latter species (March 19, 1898, March 25, 1901), although in 1900 our first record was not made until April 1, a pair shot on that day by a gunner having come into our possession. The last occurrence in spring was noted on April 28. In the fall the first specimen was seen on September 19, and two days later a flock of about ten birds was found in Ridge Pond, one of which was secured. Curiously enough, no others were observed from this time until November 6, while the latest record for the season was for November 13, although no doubt this date, like many others referring to waterfowl at this season, did not correctly indicate the actual time of departure of the species. Mr. Simpson recorded it in 1902 between November 17 and 23, and Mr. Bacon says that "December 5, 1901, is by far the latest date upon which I have observed this species," and adds that September 26, 1899, is an average date for its arrival in the fall. A specimen in Mr. Sennett's collection was taken April 21, 1875. This duck is called "Specklehead" by the gunners about Erie.

24. **Nettion carolinensis.** GREEN-WINGED TEAL.

A regular and rather common transient, although seldom as well represented as the Blue-winged Teal. Mr. Bacon has observed them about as early in the fall as the other species, as for instance on September 1, 1894, September 15, 1899, and September 19, 1896 and 1901, but in his experience they are always to be found a week or two after the Blue-wings have disappeared. Thus, on November 8, 1901, he killed a pair, and on November 9, 1902, he secured one from a local gunner. Mr. Simpson has received specimens taken as late as November 23, 1903, while November 4 was our last recorded date in 1900. Dr. Warren observes (*Birds of Pennsylvania*, 1890, 38) that these birds are quite common in this locality late in August as well as in September, and that many of them are shot for the market. What may have been one of this species was seen by Mr. D. A. Atkinson August 24, 1900, but it was not certainly detected again by any member of our party until September 19, and only a few were noted during the entire fall migration. But one individual was recorded in the spring; this was a fine male which was secured from a gunner on April 7, having been killed that morning over decoys at Crystal Point. That this record could scarcely be counted as a date of arrival is evident from the following extract from Mr. Bacon's notes: "On March 12, 1898, I killed one from a small flock. The latter date I

consider rather early, the first having been noted in other years as follows: March 28, 1895; March 23, 1901; March 15, 1902." While, according to Dr. Warren, birds of this species are occasionally captured here during the early summer months, there is no evidence to show that the species has nested here in late years. It is partial to the ponds on the Peninsula, but is often taken on the bay as well, and at marshy pools on the mainland.

25. *Querquedula discors*. BLUE-WINGED TEAL.

Fairly common as a spring and fall migrant, and rather more numerous than the preceding species. Three were seen April 12, 1900, on Yellow Bass Pond. Two of these were secured. A flock of six, one of which was taken, was met with in the same place on April 25, and the last specimen was seen on April 28. The earliest date of appearance given by Mr. Bacon is March 27, 1898. He has seen single birds well into the breeding season (May 5, 1892, May 30, 1901), but never has seen one in midsummer. Late in August, or early in September (August 28, 1901, September 6, 1893 and 1902, September 7, 1900, September 8, 1875 and 1894), these birds again appear about the ponds of the Peninsula. Sometimes they come in flocks of twenty to thirty birds, and upon their arrival are very unsuspicious, while in other seasons they are few and far between and correspondingly wary. In Mr. Sennett's collection there are specimens secured September 25, 1875, while our latest fall date in 1900 was September 26. Doubtless, however, it often remains later. Mr. Simpson reports specimens shot at Crystal Point in April of 1902 and 1903, but ordinarily it is seldom found away from the ponds.

26. *Spatula clypeata*. SHOVELLER DUCK.

This is one of the rarer ducks in this locality, where it is of irregular appearance in spring and fall. A pair, shot on the bay, April 21, 1875, are in Mr. Sennett's collection. On April 20 and 21, 1900, there was a small flight of these ducks, they having been found on several occasions, and one male secured (at the head of Big Pond). March 30, 1902, Mr. Bacon secured a single specimen from a gunner, and recorded the species again on April 2. These are all the available spring records, and the notes for the fall migration are similarly meagre. Mr. Bacon killed two in the fall of 1893 (September 6 and 21), and saw several others, even as late as November 18. Since then he has heard of an occasional specimen being shot, although he has

not personally met with the species at this season, while the gunners all consider it rare. In the fall of 1900 it came under our notice but once, when three specimens killed by a gunner on Horseshoe Pond, September 25, were examined. Mr. Simpson reports having taken a single adult female, November 13, 1903.

27. *Dafila acuta*. PINTAIL DUCK.

This species is locally known as "Gray Duck," and is common as a transient visitant during the migrations. They arrive with the Black Mallards in the spring, Mr. Bacon's earliest records at that season being February 23, 1891, while for other years his dates are as follows: 1897, March 11; 1898, March 10; 1901, March 25; 1902, March 11. In the fall they come early in September, (September 6, 1893, September 11, 1894, September 7, 1895, September 15, 1899), and are usually gone by the end of the following month, although on two occasions, November 13, 1902, and December 3, 1903, much later records were made. In 1900 a few were seen on Big Pond on April 20, this being our only spring record. September 19 was the date of their first appearance in the autumnal movement, and they were recorded at intervals from that time until as late as November 16. Single individuals or small parties were the rule, always in the ponds. In all the adult male specimens examined in the fall the middle tail-feathers were in a worn condition and no longer than the others. An interesting specimen, illustrating the moult of the male from summer into winter plumage, was secured on October 17. Mr. Simpson contributes the following notes on this species: "Several males were seen April 26, 1902, in a large flock of ducks that frequented Misery Bay on that occasion. On November 10, 1903, a female was observed."

28. *Aix sponsa*. WOOD DUCK.

This species is tolerably common as a transient visitant in spring and fall, and every year a few pairs spend the summer on the Peninsula, where they rear their young, their shy and secretive habits during the nesting season enabling them to pass comparatively unnoticed until the young are fairly well grown. Broods of young birds have repeatedly been seen in August, and numerous specimens secured. On August 10, 1901, a flock of ten young birds was noted by Mr. Bacon. Two young taken August 12, 1903, in which the postjuvinal moult had just commenced, are in the Carnegie Museum. It is early in April before

this duck arrives from the south, but it is counted a rare bird in the spring. The local birds seem to leave early in September, but individuals, perhaps migrants from more northern localities, have been seen as late as October 19 (1901). In 1900 the only occasion upon which it came to our notice was on November 10, when we secured a female which a gunner had killed in one of the ponds. Upon skinning it proved to have wounds in both wings near the tip, which had healed, leaving a swelling. This may perhaps account for the late date of its occurrence.

29. *Aythya americana*. REDHEAD DUCK.

A regular migrant, most numerous in the fall, but never abundant. In the spring of 1900 we found them with the flocks of Scaups and Golden-eyes on Erie Bay, and like these they were wild and difficult of approach. The first were noted March 29, and the last April 7, although doubtless these limiting dates included but a fraction of the period during which the species stays (a specimen in Mr. Sennett's collection dated April 21, 1875, would at least indicate as much). They reappeared in the fall on October 13, and were seen at frequent intervals up to November 17, and probably remained still later. On December 9, 1902, the writer saw some Redheads that had been killed on the bay within a few days. Mr. Bacon contributes the following observations: "Soon after the first of October (October 6, 1894; October 3, 1901), and with the first flight of 'deep water' ducks come the Redheads. They are wary and are seldom killed in any numbers. Several fall seasons I have known a flock of at least one hundred of these birds to feed week after week in the western end of the bay, and only an occasional one was killed. They remain well into November, while one was once taken as late as December 15 (1900), and I have seen a record of a specimen shot January 2, 1903. This species prefers the waters of the lake or bay, but, like the Scaups, occasionally a bird drops into the ponds."

30. *Aythya vallisneria*. CANVAS-BACK DUCK.

The Canvas-back is one of the rarer ducks, and was detected by us only during the fall migration of 1900, when it was the last of the ducks to put in an appearance. Mr. Worthington killed a single bird, a female in moulting plumage, over decoys at Crystal Point on November 13. Two others, also females, which we examined were killed by gunners on November 16, one in Horseshoe Pond (said to have been

one of a flock of four), the other on Erie Bay. Mr. Bacon records the species as an irregular migrant and winter resident, and adds: "I have never seen this bird alive, but nearly all the older generation of sportsmen have killed one or two specimens. On December 21, 1900, a flock of seven appeared at the eastern end of the bay, three of which were shot by Mr. Frank Claus, from whom I secured them. On January 8, 1901, another specimen was killed by Mr. Claus, which likewise came into my possession. Other examples have since been brought me, taken on March 13 and 26, 1902, January 1 and 2, and December 5, 1903. On October 23, 1903, I examined five specimens that were killed on the bay — my earliest fall date." Most of the above dates are represented by specimens in the Carnegie Museum. There appear to be no other records for the occurrence of this duck so far north in winter. Its favorite food, the wild celery (*Vallisneria spiralis*) grows in the bay at certain places, so that it would naturally be expected to occur regularly did other circumstances permit.

31. *Fuligula marila*. GREATER SCAUP DUCK.

This duck was not distinguished from the next species by the gunners, both being known as "Blue-bills." Moreover, owing to the difficulty of discriminating the two forms in life, little can be said definitely of the present species, more than that in the spring of 1900 it certainly constituted a portion of the flocks of Scaups during the earlier part of the season. Specimens were secured on March 29 and April 13, that taken on the latter date being a male in full plumage. Beyond stating that it was evidently much less common than the Lesser Scaup, it is impossible to indicate the relative abundance of the two species. In the fall none were noted until November 8, and specimens were examined which were killed on November 14 and 15. Mr. Simpson reports the species on November 20, 1902, and April 14, 1903, having taken two specimens on each date. Mr. Bacon's notes, however, are of special interest in that they are supplementary to those just presented, tending to show that the seasonal status of this duck is about the same as that of the Canvas-back. "Although I feel sure that the present species is never found here in any great numbers, it probably occurs regularly during the migrations and through the winter. . . . I have occasionally seen one in the markets, and have secured specimens from local gunners taken on the following dates: December 10, 13, and 27, 1902, and January 5, 1903," all of which are at present in the Carnegie Museum.

32. *Fuligula affinis*. LESSER SCAUP DUCK.

The Lesser Scaup is by far the commonest duck at Erie Bay, as well as the one the migration of which in the spring covers, perhaps, the longest period. No doubt a few always winter here ; at any rate they appear just as soon as the ice breaks up. At the time of our arrival in the spring of 1900 (March 23) they were already numerous, and with the breaking up and final disappearance of the ice the flocks were augmented by fresh accessions from the south. They were rarely observed on the main lake, and only occasionally on the ponds, the bay being their chosen haunt. Here they were found in flocks numbering sometimes hundreds of individuals, often associated with other species of sea-ducks, but always outnumbering them. These flocks were wild and could not be approached in a boat within one hundred yards, but refused to leave the bay, rising merely to settle in another part until again disturbed. However, many were killed over decoys set out at various points, even in the open bay during foggy weather, when a boat could be anchored at the proper distance. A favorite feeding-ground, to which the birds persisted in returning despite constant persecution, lay between one hundred and three hundred yards off the mouth of Mill Creek, where the water was only a few feet deep. No diminution in the abundance of the species was evident until late in April, and many were observed through May, usually at or near the spot just mentioned. Some specimens were shot to determine whether these late staying individuals were " pensioners " or birds in normal condition, but not enough were secured to warrant a final conclusion. Thus a specimen taken May 7 was apparently a healthy, well-developed bird, while one shot May 24 had been wounded earlier in the season. Another secured May 10 had its breast plumage ragged and cut, and a strongly smelling carcass ; it was doubtless a sick bird. The presence of this duck thus late in the season is a regular occurrence every year, as is evident from the statements of local gunners and from Mr. Bacon's notes. He says : " I am certain that this species does not breed here, but it occurs in numbers all through the spring and well into the summer months. Early in June of every year there is always a fair-sized flock feeding on the bay. Thus on June 21, 1901, I saw about fifty birds, both males and females, in one flock, and on July 9, 1892, I saw a party of eight ; this latter date is, however, my latest summer record." In further support of this statement may be recorded a party of five seen by the writer on June 17, 1897, off the mouth of

Mill Creek. The most reasonable explanation of these facts would seem to be that such late staying birds are those which for some reason have not the ability or inclination to breed, some of them at least being "pensioners," but just why these should be the only ducks known to regularly spend the summer here without breeding it is difficult to say, unless it be that their abundance brings them into more prominence. In the fall of 1900 the first migrants were noted on October 14, and by the end of that month they had become quite common, although the great flights did not take place until the cold stormy weather in November came. They were still the most common ducks at the close of our stay, and doubtless remain as long as there is open water, or well into December. Mr. Bacon contributes the following interesting account of the migration of this species: "On one occasion I saw, as I believed, all the Lesser Scaups in this neighborhood start for the south. The bay had frozen over a few nights before, and on this particular afternoon a large flock of these ducks kept circling over the lake, sometimes high in the air, again dropping swiftly to the surface and skimming along for a mile or so. Finally, having evidently gathered into one flock all the birds of the vicinity, they rose to a great height, and, starting southward, were soon lost to view." A peculiar habit of some of the ducks under certain circumstances is illustrated by the following note, also from Mr. Bacon: "I once wounded a duck of this species in shallow water, and, wading out to where I saw it last, I found it holding to a strong weed by its bill, two or three feet below the surface, stone-dead."

33. **Fuligula collaris.** RING-NECKED DUCK.

This duck is a transient visitant in spring and fall, probably of regular occurrence, but not common. By the gunners it is not distinguished from the Lesser Scaup, with which it is sometimes found associated, while its seasonal status, save that there are no late spring or summer records, would appear to be about the same. The notes on this species are scanty. The earliest spring record is for March 15, 1903, on which date Mr. Bacon secured a pair shot by a gunner. On April 12, 1900, he shot a male from a flock of five, which were found feeding in a small pool in the fields on the mainland. Mr. Simpson reports a female shot April 14, 1902, and in Mr. Sennett's collection there is a female taken April 21, 1875. These are all the available spring records, and those for the fall are also few in number. A pair in Mr. Sennett's collection, taken October 10, 1889, constitute the

earliest fall record, while Mr. Simpson writes that he secured a female at Crystal Point November 12, 1903, and received a fine male shot by a gunner on December 3 of the same year.

34. *Clangula clangula americana*. AMERICAN GOLDEN-EYE.

The Golden-eye, called by the gunners "Whistler," is of regular and common occurrence as a spring and fall transient, and is found also through the winter, although in much reduced numbers. Whenever the bay opens up a little a few Golden-eyes find the open holes, so that it would seem that they are always present on the lake in winter. Late fall (November) and early spring (March), however, find them most abundant. When it is not too rough, they prefer the open lake for a feeding-ground, but they are commonly found on the bay also, and occasionally even in the ponds. As a rule they go in flocks by themselves, but sometimes occur in the company of other ducks, the Lesser Scaup in particular. Numerous flocks were noted by us on March 28, 1900, although it seems probable that many transient birds really arrived somewhat earlier, inasmuch as the latest record was for April 13, which would indicate that the migration extended over a period of only about two weeks, which seems too short by comparison. According to Mr. Simpson's experience, however, April 26 and 16 were the latest dates for the spring in 1902 and 1903. October 29, 1889, is the earliest fall record available, being the date of a specimen in Mr. Sennett's collection. In the fall of 1900 the first birds were seen November 6. All the male specimens examined in the fall were in the immature plumage save one, taken November 16. Later in the season adult birds seem to be somewhat more numerous.

[*Clangula islandica*. BARROW'S GOLDEN-EYE.

This species may be expected to occur here as a casual winter visitant. The nearest locality at which it has been taken appears to be Lorain County, Ohio, (McCormick, *Auk*, IX., 1892, 397; Jones, *Birds of Ohio*, 1903, 44). Certain intelligent sportsmen, indeed, have informed the writer of its undoubted occurrence at Erie, but in the absence of actual specimens the records are not admitted. The adult males of this species may be distinguished from those of *Clangula clangula americana* by the gloss of the head, which is purple and violet, rather than green, and by the fan-shaped instead of rounded white spot at the base of the bill.]

35. *Charitonetta albeola*. BUFFLE-HEAD DUCK.

Common as a spring and fall transient. In the spring of 1900 they were found usually in small parties by themselves, although during the earlier part of their sojourn they were often met with in larger numbers associated with the flocks of Scaup Ducks. Sometimes, too, they were

noted in the ponds with other ducks, but the bay seemed to be their favorite resort, and many were killed here over decoys, as well as shot from a boat, they appearing less wild than most ducks. The first was recorded March 23, and they may have come even earlier, (Mr. Bacon's earliest record is March 11, 1899). Early in April the period of greatest abundance was reached, and the last was noted on April 20. In the autumnal movement they were not observed until November 5, when cold weather had set in, but were common during the remainder of our stay, being recorded almost daily up to November 16, although here, as probably also in the case of numerous other waterfowl, the last date of record by no means approximated the real date of departure, since Mr. Bacon's latest date for this particular season was December 15, a month later, while a specimen in Mr. Sennett's collection is labeled December 19, 1874. Another of Mr. Sennett's specimens was taken October 31, 1875, which is the earliest fall record available. Mr. Simpson recorded this duck during his visit from April 24 to 27, 1902, this constituting the latest spring record.

36. *Harelda hyemalis*. LONG-TAILED DUCK.

This is another duck of common occurrence in spring and fall, being found usually in small parties, or in flocks of moderate size. They were noted first on March 28 in the spring of 1900, becoming common during the first half of April, while single individuals were secured as late even as May 5 and 18. Upon their return in the fall the earliest record was made October 18, and by October 25 they had reached the height of their abundance. Although all which were thus recorded were seen on the bay, it is evident that this species must be far more numerous on the waters of the open lake, miles off the shore. Here the birds, in diving for their food, get entangled in the immense gill-nets set by the fishermen, and perish by drowning. In lifting the nets their bodies are removed, and as a rule thrown overboard, being little esteemed as food, when they eventually drift to shore, to be devoured by Crows and Bald Eagles. Many thousands are thus destroyed annually, but, singularly enough, no other species of duck seems to suffer similarly, unless it be the various species of Scoters, but the proportion of these thus taken is inconsiderable. Such wholesale destruction as this involves has necessarily operated to reduce their numbers materially. Eight or ten years ago these birds were a pest to the fishermen of Lake Erie, particularly in the fall. Mr.

Bacon's published notes on this subject (*Ornithologist and Oölogist*, XVII., 1892, 45) are so interesting that they are here reproduced entire:

"This bird is in my opinion the most abundant duck in this locality, during migrations generally appearing in immense flocks after a blow. Last November [1891] these birds were caught in the herring nets on Lake Erie by the thousand. At Dunkirk, N. Y., between five and seven thousand were taken at one haul. At this port (Erie) the largest haul, to my knowledge, was eight hundred. A very few American Black Scoters were also taken, but no other species. Lake Erie is, to be sure, a shallow lake, but the fishermen informed us that most of the ducks were caught when the nets were set [in] 15 fathoms (90 feet) of water, a few being caught in 18 or 20 fathoms. One captain told me that he caught three ducks of this species in 27 fathoms, and I do not doubt his word. One of our daily papers printed a long article on this subject, claiming that the fishermen set their nets on purpose to catch ducks, but I had ample proof that such was not the case, for the ducks were invariably so badly entangled in the nets, as to cause considerable trouble in getting them out; besides, after the first large haul the markets were glutted in all directions, and many were thrown away.

"This bird is well known to be an expert diver, yet the fact that they can descend to such depths as I have noted seems remarkable to me. Their flesh is very poor, still it seems a pity that they should be slaughtered in this way, and while I do not think they are liable to be exterminated, last fall's catch must have made quite a diminution in their ranks."

Feeding as they do mainly on the lake, and flying into the bay at dusk to spend the night, they are seldom killed by gunners in any numbers, and, indeed, they are not worth the ammunition, as they are too fishy for table use. The species is called "Pintail" or "Coween" by the local gunners, and exhibits a great variety of plumages in the transition from the winter to the summer dress, and *vice versa*. Many individuals attain a practically complete breeding plumage before their departure in the spring, which does not finally take place until about the first of June, a few lingering until that date almost every season. The single specimen in Mr. Sennett's collection was taken at the remarkably early fall date of September 13, 1876. On the other hand, they may winter here, occasionally at least. Thus, there

are specimens in the Carnegie Museum shot by gunners on Erie Bay on January 20 and 29, 1901, and February 16, 1904, respectively. Mr. Bacon writes, that, while shooting snipe in the fields April 31, 1901, he killed one of these ducks, that came flying overhead; with this exception, he has never seen one away from the lake or bay.

[*Histrionicus histrionicus*. HARLEQUIN DUCK.]

There appears to be no valid Ohio record for this northern species, but it may occur along Lake Erie as a casual or accidental winter visitant.

Somateria dresseri. AMERICAN EIDER.

This is an essentially marine species, which occurs "south in winter . . . to the Great Lakes" (*A. O. U. Check-List of North American Birds*, 1895, 57), and may be expected as a straggler at Erie at that season.]

37. *Somateria spectabilis*. KING EIDER.

The King Eider is a casual winter visitant on Lake Erie, there being records from Sandusky, Cleveland, and Buffalo. (See Wheaton, *Birds of Ohio*, 1882, 536, and Allen, *Bulletin Nuttall Ornithological Club*, V., 1880, 62). The first record of its occurrence in the region of which this paper treats was published by Mr. George B. Sennett, whose notes (*Auk*, VII., 1890, 88) are herewith quoted entire: "The great storm of Nov. 28 and 29, 1889, on the Great Lakes, brought into the Bay of Erie a flock of fifteen to twenty King Eider Ducks. They were seen about noon of Nov. 30 swimming in close to the Iron Ore Dock where numbers of men were at work unloading vessels. The hunters were soon down on the dock with guns and others put out in boats. So fearless or stupid were the Ducks that it was no trouble to shoot them, and at one discharge three were killed. Mr. James Thompson very kindly took two of the birds home with him and telephoned me that some very queer-looking Ducks had been shot that day, placing at my disposal the pair he had secured. The next day, December 1st, we went to the dock and to all the hunters we could get track of and captured all the specimens that had not already gotten into the pot. Out of fourteen that we could trace as having been killed, we were fortunate enough to obtain seven in good condition. The oldest hunters here do not remember to have seen any of the kind before. They call them Boobies, the same name they give to the Surf Ducks that are frequently taken here. No other Ducks were seen in the bay when the Eiders appeared. They are in all varieties of immature plumage, none appearing in anything like the breeding condition. The nearest approach to it was one male that

showed pearl-gray mixed with dark on top of head; he also had a distinct black V-shaped mark on the white throat. The other males had browner heads and fainter black V-shaped throat markings. Of the seven, six are males, and one a female in good typical plumage. I believe that none of this species has been recorded as taken on Lake Erie since 1879, when eighteen were shot at Buffalo, N. Y. (See note by J. A. Allen in *Bull. Nutt. Ornith. Club*, Vol. V, p. 62.)" Substantially the same account is given by Dr. Warren (*Birds of Pennsylvania*, 1890, 46), who adds that "Two hunters, who unfortunately before they knew we were anxious to preserve the ducks for our collections, had cooked three or four which they had captured, said the dark-colored flesh was tough, stringy, and so rank and unsavory that they could not eat it." There are four of the above birds preserved in Mr. Sennett's collection, including the one female; the others evidently went into Dr. Warren's possession. To the above records of the occurrence of this species at Erie the writer is able to add two more, both on the authority of Mr. Bacon. On November 13, 1894, five of these birds were shot on the bay, one of which he secured, and which is now deposited in the United States National Museum (Biological Survey Collection). Again, on December 30, 1900, another specimen—one of two seen—was shot on the lake east of the city limits, and this also came into Mr. Bacon's hands, and thence to the Carnegie Museum, where it is now mounted in the Pennsylvania collection. Both specimens were immature males.

38. **Oidemia americana.** AMERICAN SCOTER.

This duck has been observed only as a transient late in the fall, although it probably remains through the winter. It seems to be the least numerous of the genus here, having been certainly detected on but three occasions. One was shot at Crystal Point, November 13, 1900, and another near the Life-saving Station, November 17, by gunners, the first specimen coming into our hands. Mr. Simpson reports one taken at Crystal Point, November 10, 1903, and adds that several ducks seen by him off the outside shore about this time were either this or the Surf Scoter.

39. **Oidemia deglandi.** WHITE-WINGED SCOTER.

Fairly common as a transient visitant in the fall, and of not infrequent occurrence as a winter resident, but seemingly rare in the spring. In the fall of 1900 it was numerous in the waters of the lake off the

outside shore, often closely associated with *O. perspicillata*, with which it was found in mixed flocks. Such were first noted on October 9, and at frequent intervals thereafter until October 27. Occasionally single birds appeared on the bay, where they continued to be seen until November 19, when the work of the season was concluded. Mr. Simpson notes that specimens were shot at Crystal Point, November 22, 1902, and November 13, 1903, and others were seen. Mr. Bacon reports specimens taken November 6, 1894, January 30, 1901 (a pair), and November 27, 1903. The only spring record available refers to a single individual seen March 27, 1900, in a flock of Lesser Scaup Ducks on the bay. The only full-plumaged bird seen by the writer from this locality is a specimen in Mr. James Thompson's possession, said by him to have been taken late in the fall, about 1892.

40. **Oidemia perspicillata.** SURF SCOTER.

The general notes on the last species are applicable to this as well, save that there is no spring record in the present case. Flocks were noted on the outer lake from October 9 to November 5, 1900, and a single bird was seen as late as November 13. A specimen shot on Horseshoe Pond November 7 was the only one identified by Mr. Simpson during his visit in the fall of 1903. In Mr. Sennett's collection there is a female taken at the head of the bay October 17, 1875, while Dr. Warren (*Birds of Pennsylvania*, 1890, 48) says that in January, 1890, he purchased a bird of this species from a hunter who had shot it on the bay, where a flock of about twenty was said to have been seen. All three species of Scoters are known locally as "Boobies," and are little esteemed for the table.

41. **Erismatura jamaicensis.** RUDDY DUCK.

Occurs as a transient visitant only, far more numerous in the fall than in the spring, although as a species much less common than formerly. We did not notice it at all in the spring of 1900, but Mr. Bacon has occasionally observed it at that season, and Mr. Simpson saw two adult males shot by gunners April 13, 1903. A specimen in Mr. Sennett's collection is marked April 18, 1875. Dr. Warren remarks (*Birds of Pennsylvania*, 1890, 49) that stragglers are occasionally observed at Erie Bay in summer, but that the species is not known to breed there, while Mr. Bacon records a single female (now in the Carnegie Museum) taken June 8, 1892, and a pair observed May 29, 1904, adding that these are the only ones he has seen

under such circumstances. However, the breeding range of this duck is coextensive with its geographic distribution, and it is not impossible that it should have nested here in former years. In the fall movement it has been met with, according to Mr. Bacon, as early as September 27 (1893), while October 2, 1875, is the date of a specimen in Mr. Sennett's collection. October is evidently the month when it is most common. In the fall migration of 1900 it was most frequently observed on Misery Bay, where the first was seen October 1, a single bird in company with a Coot, both of which were secured. By October 12 it had become quite numerous, and was recorded at intervals until November 13. It was found sometimes singly, but more often in twos and threes or even larger parties. By the gunners it was called "Hardhead." Most of the specimens examined were in immature dress. Dates of last appearance in other years are November 6, 1894 (Bacon), and November 12, 1903 (Simpson).

[*Chen hyperborca nivalis*. GREATER SNOW GOOSE.

"Not rare on Lake Erie," according to Dr. J. M. Wheaton (*Birds of Ohio*, 1882, 518), and be looked for as a casual spring and fall transient. The Lesser Snow Goose (*Chen hyperborca*) may also occur, but the larger form is the one more likely to be found. Mr. Lynds Jones gives both forms as occurring in a number of counties in Ohio (*Birds of Ohio*, 1903, 48).

Chen caerulescens. BLUE GOOSE.

Another goose whose occurrence here as a casual visitant may be expected in spring and fall. "A specimen which I saw in Cincinnati was said to have been taken on Sandusky Bay." (Wheaton, *Birds of Ohio*, 1882, 520). "Two were captured on the Oberlin water-works reservoir, October 28, 1896." (Jones, *Birds of Ohio*, 1903, 49.)

Anser albifrons gambeli. AMERICAN WHITE-FRONTED GOOSE.

There are a few records from Ohio given by Dr. J. M. Wheaton (*Birds of Ohio*, 1882, 518), who says that it is "more common on the lake and reservoirs than elsewhere," so that it is not unreasonable to look for its casual occurrence during migration at Erie also.]

42. *Branta canadensis*. CANADA GOOSE.

The Wild Goose is a regular and fairly common migrant at both seasons, concerning which Mr. Bacon writes as follows: "Every fall two or three Geese are killed about the bay and Peninsula, but in the spring they keep to the fields (and are six months older too!), and are seldom brought to bag. I have never seen them during the winter, nor earlier in the spring than March 2 (1902). Other dates of apparent arrival are March 28, 1895, March 13, 1897, and March 12,

1898. On April 30, 1889, I saw a flock of a dozen 'Geese, and on May 1, 1902, a single pair; I consider both of these very late records. A flock of about fifty was noted October 20, 1899, which is perhaps a fair average date for the arrival of the species in the fall." During the season of 1900 it was observed as a not uncommon transient, but was not seen to alight, the flocks passing over well out of gunshot. The first spring record was for March 29, when a flock of a dozen birds was noted, and another flock of the same size was seen April 7. On the return of the species in the fall October 26 and 27 were days of great movement, large flocks passing southward at this time. A single individual was seen flying south November 13. Mr. Simpson states that several flocks were seen passing over November 22, 1902, while during the big blow of April 26, 1902, five individuals were observed.

[*Branta canadensis hutchinsii*. HUTCHINS' GOOSE.

This form resembles the Canada Goose in color, but is smaller. Dr. J. M. Wheaton records it from Sandusky Bay on the authority of Mr. R. K. Winslow (*Birds of Ohio*, 1882, 522), and it may occur occasionally with the larger form at Erie also, although specimens would be required to settle the matter beyond dispute.

Branta bernicla glaucogastra. BRANT.

Essentially a marine species, rare in the interior. The Ohio records cited by Dr. J. M. Wheaton (*Birds of Ohio*, 1882, 520) are admitted by him to be rather unsatisfactory. However, it is apt to occur along Lake Erie as a rare or accidental visitor.]

43. *Olor columbianus*. WHISTLING SWAN.

A rather rare and irregular spring and fall visitant. Mr. Bacon saw one individual on the bay March 11, 1897. Two were killed in 1901, one in the spring (April?), and another (an immature bird) in November, which latter bird is now in the Carnegie Museum. A flock of about twenty was reported by Mr. Faulkner G. Lynch to have been seen on November 16 of the same year. Mr. Simpson writes that on November 19, 1902, he saw a party of four flying down the bay early in the morning. The latest record is of an adult in full plumage shot by a gunner on March 30, 1904.

[*Olor buccinator*. TRUMPETER SWAN.

This swan may be of casual occurrence here as elsewhere in the Eastern United States. There are some Ohio records (Wheaton, *Birds of Ohio*, 1882, 516; Jones, *Birds of Ohio*, 1903, 51). It could not readily be distinguished from the other species in life, and any records of its occurrence must rest upon specimens.]

44. *Botaurus lentiginosus*. AMERICAN BITTERN.

A summer resident on the Peninsula, fairly common for a species of such solitary habits, finding congenial haunts in the rank growth of rushes and other aquatic plants fringing the various ponds, but not averse to bushy places. Although no nests are actually known to have been found, it doubtless breeds in such situations, where it has been observed in every month from April to October inclusive. The earliest dates of arrival are those borne by two specimens in Mr. Sennett's collection, marked respectively April 4, 1888, and April 10, 1875. Mr. Bacon has not noted it earlier than April 13 (1895) or 15 (1892). In the spring of 1900 its first recorded appearance was on April 17, but it could scarcely be said to have reached its normal summer abundance until May. The latest fall records are October 26, 1875 (Sennett); October 28, 1893, and 17, 1892 (Bacon). We did not see it in 1900 after October 6. It is rare anywhere away from the Peninsula save during migrations, but Mr. Bacon saw one in a grassy marsh on the mainland June 27, 1891.

45. *Ardetta exilis*. LEAST BITTERN.

This diminutive species occurs as a summer resident, more common than its larger relative, but unlike it never observed away from the tracts of rushes and marsh grass save when disturbed, when it will occasionally alight in the shrubbery. Yellow Bass and Niagara Ponds, accordingly, are the ponds where it is most numerous, affording as they do the most extensive areas of this kind. A number of individuals, two of which were secured, were noted here on June 26 and 27, 1899, when they were doubtless breeding. There is no record of this bird away from the Peninsula or bay shore, nor has its nest been found up to date, although search at the proper season would undoubtedly discover it. It is a much later comer than the American Bittern, the first to arrive in 1900 being recorded May 21, and becoming common soon thereafter. In other years the observed dates of arrival have been May 24, 1875 (Sennett); May 19, 1892, May 25, 1893 and 1901 (Bacon). The only instance of its occurrence in the fall which was observed related to specimens secured on August 27 and September 3 respectively, which would indicate its early departure at this season. September 7, 1892, is Mr. Bacon's latest date, but in 1902 Mr. Simpson reported that a single bird had been seen September 25.

[*Ardetta neoxena*. CORY'S LEAST BITTERN.

This species (if species it be) has been found near Toronto, also in Michigan, and should occur at Erie at least as a transient.]

46. *Ardea herodias*. GREAT BLUE HERON.

Although this species occurs through the summer months, it is not believed to breed anywhere in the vicinity, no nests having been seen or reported. Individuals may be found any day in July and August on the Peninsula, on the outside beach as well as about the ponds, while during migrations in spring and fall it is tolerably common also. It is but seldom met with on the mainland, although an occasional bird has been noted there in the spring. The following dates, culled from Mr. Bacon's note-book, are of interest as indicating its times of occurrence and migration: May 30, 1901, three birds; June 25, 1900, one bird; March 31, 1899; March 27, 1902; April 4, 1892; November 22, 1902. During the spring movement it sometimes occurs in flocks. A party of six was observed April 12, 1900, and Mr. Simpson writes that he flushed ten birds together in Niagara Pond, April 14, 1903.

[*Herodias egretta*. AMERICAN EGRET.

Stragglers may be expected to occur in this region, especially in late summer and early autumn.

Egretta candidissima. SNOWY HERON.

Mr. Sennett's record as given by Dr. Warren (*Birds of Pennsylvania*, 1890, 60) is too indefinite as to the exact locality to warrant the inclusion of this heron in the Erie list. If it occurs at all it could only be as a summer straggler from the south.

Florida carulea. LITTLE BLUE HERON.

Mr. L. M. McCormick notes a specimen taken near Oberlin, Ohio, about 1882, (*Auk*, IX, 1892, 397), and it is apt to occur at Erie also as a straggler.]

47. *Butorides virescens*. GREEN HERON.

This species may be considered a common summer resident, breeding in suitable situations about the pools and along the streams of the mainland, and also, according to Mr. Bacon, on the Peninsula, although our experience in the spring of 1900 would scarcely confirm such a statement, as the bird was met with there on but a few occasions during the entire season. The first spring record was for April 19, when a single bird was seen in a pool in an open woods on the ridge south of the city. The latest record was for August 29, but doubtless this was too early by a month.

48. *Nycticorax nycticorax nævius*. BLACK-CROWNED NIGHT HERON.

"Two immature Night Herons, said to have been killed in a swamp in this neighborhood, were brought to a local taxidermist a few years ago, in the summer." (Bacon.) The species is doubtless to be listed as a rare summer resident.

49. **Rallus elegans.** KING RAIL.

A rare transient visitant, an occasional bird having been taken here. Mr. James Thompson has a mounted specimen killed by him about 1898, late in the fall. He has never seen but the one, while Dr. Warren's statement (*Birds of Pennsylvania*, 1890, 68) that Mr. Sennett has observed it in Erie County as a spring migrant is not supported by specimens in Mr. Sennett's collection. Mr. Bacon never met with the species until 1902, when he was so fortunate as to secure three specimens (all shot on the mainland), one each on April 17, May 7, and September 13, respectively, the one taken on the latter date being an immature bird. All are now in the Carnegie Museum.

50. **Rallus virginianus.** VIRGINIA RAIL.

Occasional as a summer resident, and during the migrations said to be regular and tolerably common. However this may be, in 1900 we recorded it only as a rare fall transient. What was probably the same individual was flushed in Niagara Pond on September 28, October 1, and October 4. A specimen brought us September 29 constituted our only other record. As to its nesting here there is no question, as Mr. Bacon's notes attest: "On May 26, 1891, I found a nest containing nine eggs in a swamp west of the city, and on June 2, 1892, I found another nest in the same marsh, also containing nine eggs. April 18 (1900) is the earliest date upon which the species has been noted in the spring, while recorded last dates are October 25 (1901) and 28 (1893)."

51. **Porzana carolina.** SORA RAIL.

The Sora Rail is mainly a transient, not uncommon in the spring, and very abundant in the fall, outnumbering the Virginia Rail ten to one, and like that species occasionally remaining through the breeding season. Two nests have been found by Mr. Bacon, one June 4, 1890, in a bunch of cat-tails at the "Head," containing eleven eggs, the other May 25, 1892, in the same marsh where the Virginia Rail was found breeding, likewise with eleven eggs. March 31, 1902, is the earliest record of the arrival of this species; this, however, is very exceptional indeed, the usual date ranging from April 27 (1895) to May 5 (1892). In the spring of 1900 it was observed by us on but five occasions, a single individual having been met with in each case. The first was on May 10, when a bird was killed at the mouth of Mill Creek, while the other occurrences were all on Niagara and Yellow

Bass Ponds, from May 24 to 31. Although found in some numbers in all the marshy spots about the bay, these two ponds seem to be the favorite resorts of the species during the fall movement, offering, as they do, the best and most extensive tracts of suitable covert, the growth of wild rice, on the seeds of which the birds feed, constituting the main attraction. They were already present on August 20, 1900, when our fall observations began, but as a rule the first great flight does not take place until about September 1, varying only a day or two either way, on which occasions, and at intervals thereafter, the birds are excessively abundant, and very large bags are often made by gunners. "I have seen the time," writes Mr. Bacon, "when Niagara Pond seemed fairly alive with them," and our own experience at this season was in full accord. After September 25 they are seen only in small numbers, while October 25 (1893 and 1894) is as late as they have ever been observed, and, indeed, in 1900 we saw none after October 6. An adult male specimen in Mr. Sennett's series, taken October 25, 1889, is evidently melanic. (See *Auk*, VII, 1890, 71.) This rail is said by Mr. Bacon to be an expert diver upon necessity, as for instance when wounded and trying to escape.

52. *Porzana noveboracensis*. YELLOW RAIL.

The credit of adding this interesting species to the fauna of Erie belongs to Mr. Bacon, whose notes are herewith transcribed in full: "A rather rare spring and fall migrant, not known to the local gunners, although, like myself, they must meet with it occasionally. I observed it on the Peninsula first on September 30, 1893. In the fall of 1894 I met with it on three different occasions (October 15, 17, and 19) at the mouth of Mill Creek. On September 18, 1895, I took a single specimen in the snipe grounds west of the city, and on April 27, 1896, I took another at the same place. Again, on September 20, 1900, I shot one Yellow Rail at the mouth of Mill Creek, but in the fall of 1901 I saw and secured more than in all previous seasons combined. Evidently a small bunch, perhaps a family group, stopped in the snipe grounds (before mentioned) west of the city, where I noticed them first on September 25, when I saw three and secured two. (Previously, however, on September 15, I had received an immature bird killed by a local gunner.) From this time on I never failed to start one or two Yellow Rails by hunting through this grassy spot (marsh grass, cat-tails, and wild rice), but often they rose so close at hand and flew such a short dis-

tance that it was out of the question to shoot. Eight specimens in all were secured, the last on October 29. Seldom were more than two seen at once, but they were always flushed at about the same spot, and I am inclined to think that I secured nearly all of them. The species was also met with on April 28, May 3, and October 4, 1902, September 17, 1903, and April 23, 1904." In view of the above facts it would not be surprising if this rail should be found nesting here. Two of the specimens taken by Mr. Bacon are in the United States National Museum (Biological Survey Collection), while most of the remaining birds are preserved in the Carnegie Museum. The series exhibits considerable variation in plumage, and seems to show that the males are larger than the females. Two fall specimens, evidently immature, are very dark-colored, and have the crown and sides of the head prominently spotted with white.

[*Porzana jamaicensis*. LITTLE BLACK RAIL.

Rare as the Yellow Rail is accounted to be in most localities, this diminutive species is rarer still. Erie is possibly a little too far north for it to be found; but so little is known concerning the exact limits of its distribution that it may yet be detected here.]

53. *Gallinula galeata*. FLORIDA GALLINULE.

Careful search was made for this species in 1900 by our party, but without success. However, Mr. Bacon enters it as a rare and irregular spring and fall transient, having recorded it on the following dates, in every case on the Peninsula: May 28, 1892, August 29, 1894, September 3, 1900, August 30, 1901, and October 2, 1902. One of these birds was found swimming among the wild rice, the others were flushed along the shore of the ponds. In addition to the above records, a specimen was brought Mr. Bacon October 7, 1891, which was killed in the fields just east of the city. It seems strange that this bird is so rare here, and has not been found breeding, when Dr. F. W. Langdon has noted it as such a common summer resident at the head of Sandusky Bay, Ohio (*Journal Cincinnati Society of Natural History*, III, 1880, 228).

54. *Fulica americana*. AMERICAN COOT.

So far as known the Coot is a transient visitant only, uncommon in the spring, but quite abundant in the fall. It mainly frequents the ponds, where it skulks among the aquatic plants, less frequently the marshy shores of the Peninsula and the waters of the bay. Usually it is found singly or in small parties, which are by no means averse to

the company of the various species of ducks and grebes, but during an immense flight of this species on October 7, 1902, as many as seventy-five were seen in one flock. March 28, 1898, appears to be the earliest recorded date of arrival, but in 1900 we saw none until April 10, when a single bird was met with in a flock of Black Mallards. Others were seen later in the month, and one was shot on May 15. An individual seen on May 23, 24, and 26, when it was finally secured, was in worn and faded plumage, but showed no signs of breeding. As this locality is well within the known breeding range of the species, the only reason that it does not nest here would seem to be the general publicity of the place. However, it has been observed as early on the return movement as September 5, 1875 (Sennett), and September 7, 1900 (Bacon), but does not become common until October, and remains well through the following month, the latest date on record being December 6, 1900 (Bacon).

55. **Cryophilus fulicarius.** RED PHALAROPE.

This is more of a maritime species than the other phalaropes, and inland is the rarest of the three kinds. It occurs at Erie as a very rare transient. In Mr. Sennett's collection there is a female in winter plumage shot October 10, 1899, by Mr. James Thompson. Just six years later, on October 10, 1895, Mr. Bacon secured another specimen at the mouth of Mill Creek, which bird is now in the Carnegie Museum. These examples appear to constitute the first authentic records for Pennsylvania, although the species has been noted from both sides, at Cleveland and Buffalo (Wheaton, *Birds of Ohio*, 1882, 467, and Savage, *Auk*, XII, 1895, 313).

56. **Phalaropus lobatus.** NORTHERN PHALAROPE.

"At Erie bay and about the lake shore in Erie county this phalarope is found as a rather regular but not common migrant, seen most frequently in the fall." (Warren, *Birds of Pennsylvania*, 1890, 76.) To support this general statement there are, however, only three records positively known. Two specimens, females, taken September 29, 1888, and October 10, 1889, are in Mr. Sennett's collection, while a third specimen was secured by the writer at the mouth of Mill Creek on the occasion of the great storm of August 29, 1893, and is now deposited in the U. S. National Museum (Biological Survey Collection).

57. *Steganopus tricolor*. WILSON'S PHALAROPE.

The only authority for the inclusion of this species is Dr. Warren (*Birds of Pennsylvania*, 1890, 77), who says that "at Erie bay small flocks of these phalaropes are sometimes to be seen in the fall swimming in the water like ducks." No specimens are known to be extant, however, but for the present the record may be allowed to stand, inasmuch as there is nothing intrinsically improbable in the occurrence of the species at this point, and specimens may come to hand at any time. Dr. J. M. Wheaton speaks of it as having been repeatedly taken in the neighborhood of Cleveland (*Birds of Ohio*, 1882, 464).

[*Himantopus mexicanus*. BLACK-NECKED STILT.

A Mississippi Valley species, casually straying eastward. Dr. J. M. Wheaton says that it "has been repeatedly taken on Lake Erie, as I am informed by Mr. Winslow." (*Birds of Ohio*, 1882, 463.) There are no recent records known to the writer from this general region.]

58. *Philohela minor*. AMERICAN WOODCOCK.

A summer resident, according to our observations not very common on the Peninsula in view of the apparent adaptability of the place to its needs. It was met with on two occasions by the writer on June 26, 1899, and in 1900 a pair must have had a nest near the foot of the board-walk, as they were repeatedly flushed there, and on May 21 two young, but a few days old, were discovered. They were odd looking little fellows, covered with down of two shades of reddish-brown, and were able to run about and utter a weak peeping cry. May 29 what were presumably the same birds were again seen, then much larger and more active. Mr. Bacon contributes the following interesting observations on this species: "Common as a summer resident, arriving the latter part of March (March 23, 1901), and staying until the first severe weather in November, my latest record being November 14, 1901. Erie County contains some very good Woodcock ground for both summer and fall shooting. In favorable seasons a good many broods are raised in the vicinity of Erie, particularly on the Peninsula. As a rule they are well grown by the first of July, but I have seen young birds at that time scarcely able to fly. A single Woodcock may happen to be found almost anywhere, particularly during the fall migration. For instance, such places as a fence-row, cornfield, brier-patch, orchard, or thicket may harbor a single bird, but to find any number together it is necessary to traverse a growth of young poplars,

and if such be overrun with goldenrod it is all the more apt to prove a favorite haunt. In such a spot, during the migration, a dozen birds may be killed, apparently depopulating the place, and yet the next day there may be as many birds as ever, the result of an influx during the intervening night. In large tracts of second-growth there are often found particular spots, seemingly no better for Woodcock than a hundred other similar places, where the birds will be found with certainty day after day, unless, indeed, the ground be flooded."

59. **Gallinago delicata.** WILSON'S SNIPE.

Common as a transient visitant, and rare as a summer resident. According to Dr. Warren (*Birds of Pennsylvania*, 1890, 81), "Mr. Samuel Thompson, of Erie city, reports having discovered a nest and four eggs in June, 1889, in a swamp near the Erie county poor-house," while Mr. Bacon also records it (on the authority of Mr. George C. Russell) as nesting elsewhere in the county, outside the limits of the present paper, however. This observer writes as follows of his extensive experience with the present species: "The county in general, and the lake shore plain in particular, contain much excellent snipe ground in the spring, but in the fall the fields are seldom flooded, and being very grassy, do not furnish inducements for the birds to alight. The Peninsula on the contrary is better ground in the fall than at the other season, as the close of winter finds the edges of the ponds so bare that there is no cover for even a snipe. From my notes on the migration of this species, covering over ten years, I find that the date of its arrival on an average falls in the last week of March, March 13 (1903) being the earliest and April 10 (1896) the latest date respectively. The bulk of the birds pass through in April, and not a few linger into the following month for a week or more, or until May 7 (1892 and 1898) to May 17 (1894). Its return in the fall is seldom delayed beyond the last week in August, my earliest record being August 18 (1896) and my latest September 15 (1899), while it lingers as a rule until the first week in November, the records ranging between October 19 (1898) and November 21 (1899). A curious partial albino [now in the Carnegie Museum] was shot May 7, 1892." According to our observations in 1900 this bird is by no means so numerous on the Peninsula as the local conditions would seem to warrant. Single individuals were met with as a rule, more rarely small flocks or "wisps," always on the edge of the ponds, from April 20 to May 10

in the spring, and from August 23 to October 3 in the fall, at which season it was most numerous, however, in September.

60. **Macrorhamphus griseus.** RED-BREASTED SNIPE.

Occurs as a rare transient visitant, being mentioned by Dr. Warren as having been taken here (*Birds of Pennsylvania*, 1890, 83), doubtless on Mr. Sennett's authority, although there is no specimen in the Sennett collection. Concerning the single specimen in the Carnegie Museum Mr. Bacon speaks as follows: "While hunting in the fields west of the city July 19, 1892, a single shore-bird whose note was unfamiliar to me flew by and alighted perhaps a mile away. Following up I came upon it again at the edge of a pool, and was successful in securing the bird, which proved to be of the present species. Since that time I have seen one or two individuals, believed to have been of this species, at the mouth of Mill Creek."

[*Macrorhamphus scolopaceus.* LONG-BILLED DOWITCHER.

This bird should be looked for during the migrations. It has occurred at Strawberry Island in the Niagara River (Savage, *Auk*, XII, 1895, 313).]

61. **Micropalama himantopus.** STILT SANDPIPER.

This interesting species must be listed as an irregular visitant in the fall. It may, indeed, occur every season, but gunners would scarcely distinguish it from the Lesser Yellow-legs, with which it is often found associated. It was first observed in this locality by Mr. Bacon and the writer at the time of the great storm of August 29, 1893, on which date five specimens were taken from a small flock at the mouth of Mill Creek. On September 13 of the same year Mr. Bacon secured a single bird, and another on the day following. It was not again met with until August 31, 1895, when he shot eight specimens out of a flock of forty birds, at least half of which were Lesser Yellow-legs. These were all obtained at the mouth of Mill Creek. Since that time, however, it has been detected on the Peninsula also, about the ponds, where one specimen was taken August 7, 1901, and a second, an adult bird still retaining much of the summer plumage, on August 20 of the same year.

62. **Tringa canutus.** ROBIN SANDPIPER; KNOT.

Although given by Dr. Warren (*Birds of Pennsylvania*, 1890, 84) as a regular and somewhat common visitor at this locality in spring and fall, this species has been rarely observed of late years. A pair, shot on the Peninsula September 17, 1875, are all that are in Mr. Sennett's collection. On August 27, 1895, Mr. Bacon took a single

bird on the outside beach, and on August 30 of the same year examined two others which had been shot on the beach near the "Head." One other was secured August 29, 1896. Mr. Simpson killed a single bird from a flock of Killdeer Plover on September 10, 1900, also on the outside beach. These are all the available positive records of the occurrence of the species.

63. *Arquatella maritima*. PURPLE SANDPIPER.

Nothing is known of the occurrence of this sandpiper here beyond the brief statement made by Dr. Warren (*Birds of Pennsylvania*, 1890, 84): "Mr. George B. Sennett, of Erie city, mentions it as a straggler in his locality." There is one record for Cleveland, Ohio, given by Dr. J. M. Wheaton (*Birds of Ohio*, 1882, 476). The species should be looked for in November and December, along the outside beach.

64. *Actodromas maculata*. PECTORAL SANDPIPER.

The following account of this species is taken from Mr. Bacon's notes: "The Pectoral Sandpiper is a transient visitor, irregular, but sometimes fairly common in the spring, more abundant and regular in the fall. At the former season, if found at all, it occurs in flocks numbering from twenty to forty or fifty birds, feeding in wet places in the fields. I have met with it repeatedly during the last week in March, my earliest record being March 23, 1895, but usually it is most numerous in April, while the latest spring record is May 4, 1893. For the autumnal movement July 31, 1897, is the earliest date; this, however, is decidedly exceptional, the usual date of its arrival ranging between August 20 (1896 and 1901) and September 4 (1894). The migration continues usually until the middle of October and occasionally even later; thus, I have noted birds on October 31, 1895, and November 3, 1894. At this season it is found in flocks seldom exceeding a dozen birds, frequenting the edges of the ponds, and the marsh at the mouth of Mill Creek in particular. It does not take to cover like the Wilson's Snipe, but stands so still and quiet that it is seldom seen until it flushes. It is a hard flier and single birds afford good sport." This sandpiper is rarely found on the outside beach. One was shot there on September 10, 1900, by Mr. Simpson, which, with another taken by Mr. Worthington on Big Pond, October 31, constituted our only record.

65. **Actodromas fuscicollis.** WHITE-RUMPED SANDPIPER.

One of the rarer transients among the shore-birds. The following specimens are in Mr. Sennett's series: one, October 23, 1874, "head of bay"; two, June 4, 1875, "on the Peninsula" —the only spring record, and a very late date — and one October 29, 1889. The species was noted by the writer as quite common on the occasion of the great storm of August 29, 1893, when it was found in small flocks at the mouth of Mill Creek, feeding in the muddy slime, and very tame and unsuspicious. Since then Mr. Bacon has met with it a few times at the same place. October 11, 1894, he shot a single specimen, also again on September 28, 1895. On October 9 and 10, 1895, he secured two birds each. In the fall of 1900 a single specimen was secured (on the outside beach) by Mr. Worthington on October 15.

66. **Actodromas bairdii.** BAIRD'S SANDPIPER.

Baird's Sandpiper, essentially a bird of the interior, and recorded but once from Pennsylvania previously (Todd, *Auk*, VIII, 1891, 240), proves to be a species of moderately common and presumably regular occurrence as a fall migrant at this locality. It is found singly or in pairs, always on the outside beach, and occasionally in the company of other shore-birds. September seems to be the month when its migration is mainly performed, the earliest birds having been noted in 1900 on September 5, and the last September 29. In addition a single specimen was secured as late as November 2, but its condition indicated that it had been wounded and thus unduly delayed. Mr. Bacon has observed the species on the following dates: August 24, 1892; September 16, 1893; September 1 and 7, October 5, 1894; October 3, 1895; September 11, 1897; August 22 (the earliest record), September 1 and 5, 1902. He does not recall having seen more than a pair together.

67. **Actodromas minutilla.** LEAST SANDPIPER.

This diminutive shore-bird has been observed as a transient visitant, quite common in both spring and fall. It may be looked for almost anywhere about the bay where there is a mud-flat, or where the aquatic weeds cast up by the waves thickly strew the outside shore, and it is occasionally found in flooded fields also. On its way northward it passes through in May, the earliest arrivals in 1900 having been observed May 8, while from Mr. Bacon's notes we learn that May 24 (1893) is the latest date at this season. It returns in August, the

earliest record being August 13, 1902, and usually is present through most of September, and even until, in one instance, as late as October 3 (1895). The season of 1900 for some reason seemed to have been an unfavorable one for this species, as it was not very common in the spring, when it was noted only at the mouth of Mill Creek from May 8 to 16, and but one bird was seen in the fall (August 23). Moreover, no flocks of any size were observed, single individuals or small parties being the rule.

68. ***Pelidna alpina sakhalina*. RED-BACKED SANDPIPER.**

Tringa (Pelidna) alpina sakhalina BUTURLIN, Auk, XXI, 1904, 253.

Pelidna alpina sakhalina, A. O. U. Check-List, Auk, XXI, 1904, 412.

Quite common as a transient visitor in the fall, but rare in the spring. Some birds believed to have been of this species were noted as early in 1900 as August 22, 27, and 31, in company with other shore-birds, but no others were seen until October 11, when one specimen was taken. It was observed at frequent intervals on the outside beach up to November 3, the days of greatest movement being October 25 and 26, when flocks of considerable size were met with. Single individuals taken on November 15 and 16 had been previously wounded, which may account for the lateness of their stay. All the specimens secured were in full winter plumage. Mr. Bacon's notes on the present species are of great interest as showing its quondam abundance, as well as the reason for the decrease in its numbers. "In former years extensive flights took place about the first of November, upon which occasions bushels of them are said to have fallen to a single gun. During these great flights the flocks were accustomed to follow the outside beach of the Peninsula (having presumably come directly across the lake) to its southeastern extremity, thence crossing over to the sand-beach east of the mouth of Mill Creek, where, after having been sadly depleted by dozens of guns, they would finally rise high in the air and pass southward over the mainland, flock following flock all day long. I know this by hearsay only, but am positive that this is the bird that used to arrive in such numbers late in the fall. On October 29, 1897, I killed fifty-three of these birds out of two flocks, comprising in all perhaps as many more, and this is the nearest approach to a flight that has occurred of late years. Every season, however, numerous small flocks are found, appearing sometimes as early as the first week in October (October 2, 1894; October 3, 1895; October 6, 1891), but more commonly toward the latter part of the

month. November 9, 1894, is my latest fall record. The spring records are few indeed. I took a specimen May 16, 1892, and on May 19, 1896, I saw a flock of perhaps forty birds, and with the sun glistening now on their red backs, and then on their black breasts, as they circled back and forth after the manner of Golden Plover, it was a sight not soon to be forgotten. On April 21, 1900, I saw one of these birds which had been killed in the fields; aside from this I have never known them to be met with away from the lake. Their flesh I consider very far from being a delicacy, tasting very fishy in fact." Mr. Sennett's collection affords two additional spring records: May 23, 1875 (two specimens), and May 15, 1889. There is also one specimen, taken September 21, 1875, in his series, while Mr. Simpson reports single specimens secured on September 25 and 26, 1902, these being the earliest authentic fall records.

69. *Ereunetes pusillus*. SEMIPALMATED SANDPIPER.

A very common transient in the fall, but spring records seem to be few. A single bird was seen May 23, 1900, and in Mr. Sennett's collection there is a bird taken at the remarkably late date of June 4, 1875. In 1900 Mr. Bacon met with it in the fall movement as early as July 27, and on August 22, when our work began, it was already common, continuing in varying numbers until September 27, after which date no more were observed. It was found both singly and in flocks, very often in the company of other shore-birds, frequenting the outside beach. On August 29, 1893, it was common at the mouth of Mill Creek, and an unusually large flock was seen on the sand-beach at the Soldiers' Home grounds. This species and the Least Sandpiper, which it so much resembles in size and coloration, are not distinguished from each other by the gunners, both passing under the name of "Peep," and being slaughtered for sport whenever the opportunity offers. The Carnegie Museum has an interesting albino specimen of this sandpiper, taken by Mr. Bacon August 25, 1894; it is white, lightly washed with rusty on the crown, back, wings and tail.

[*Ereunetes occidentalis*. WESTERN SANDPIPER.]

Many small sandpipers, killed by gunners and by our own party, were examined in the hope of finding specimens of this species among them, but none were found. Still, it may yet be detected as an accidental fall migrant.]

70. *Calidris arenaria*. SANDERLING.

The Sanderling is without question the most abundant of the migrating shore-birds in the fall, although it has not been observed in the

spring. July 27 was the date of its arrival in 1900 as recorded by Mr. Bacon, and it was present and common on August 22 when our fall observations began. There was no noticeable decrease in its numbers until October, and, indeed, it continued a frequent and fairly regular visitor up to October 27. In addition a single bird, to all appearances well and unhurt, was taken as late as November 16. It was met with exclusively on the outside beach, and there were not a few days when it was the only shore-bird seen there. Single birds, or two or three together, were often found, but as a rule it was observed in flocks of a dozen or thereabouts, keeping close to the edge of the water, running down and back again with the recession and advance of the waves, ceaseless in activity and graceful in every movement. The flocks of old birds met with earlier in the season were sometimes difficult to approach, but the young, which alone were found after the first of September, were usually quite unsuspicious, and would often come within a few yards if the observer remained perfectly still. A flock of about two dozen birds was seen on the mud-flats at the Soldiers' Home grounds during a brief visit made there by the writer on August 22, 1903, this being the only time the bird was ever noted away from a sandy beach. Mr. Bacon notes that it usually appears sometime during the first half of August, and says that he has seen it as late as October 27 (1893). Mr. Sennett has a specimen taken November 1, 1874, and Mr. Simpson shot one November 17, 1902. "On September 16, 1900, I observed several feeding on a dead fish, and seemingly fighting over it." (Bacon.)

[*Limosa fedoa*. MARBLED GODWIT.

"Mr. George B. Sennett informs me stragglers are occasionally taken in Crawford and Erie counties." (Warren, *Birds of Pennsylvania*, 1890, 88.) The exact locality to which this note pertains cannot now be ascertained, although the statement may well refer to the vicinity of Erie. In this connection also it may be noted that Mr. Sennett even gives this species as *breeding* in Western Pennsylvania (Elliot, *North American Shore Birds*, 1895, 105).

Limosa hemastica. HUDSONIAN GODWIT.

This species may occur as a casual or accidental visitant. It has been noted on Lake Erie near Cleveland (Wheaton, *Birds of Ohio*, 1882, 481).]

71. *Totanus melanoleucus*. GREATER YELLOW-LEGS.

A regular transient, occurring in moderate numbers both in spring and in fall, although never so plentiful as the Lesser Yellow-legs, in the company of which it is occasionally found. More than a half dozen in any one flock have not been observed, single birds and pairs

being the rule. "March 28, 1902, was an exceptionally early date of first appearance in the spring, as they usually arrive sometime during April [April 13, 1889 (Sennett) ; April 16, 1900], many lingering well into the following month before finally passing northward [May 10, 1900], sometimes even until May 25 (1893). I secured one specimen July 28, 1896, and at that time thought the date very unusual indeed ; I have since, however, seen them in August several times. Their migration continues through September and most of October and even occasionally into November (November 4, 1893), but at no time does there seem to be any concerted movement among them, involving marked flights on certain days, as with many other shore-birds." To Mr. Bacon's notes above quoted may be added Mr. Simpson's record of a bird seen flying over at Crystal Point, November 18, 1902. In 1900 our earliest fall date was August 25, and the latest October 31. The length of the period of migration in this species on its southward movement is remarkable, and equaled in the case of but few other birds. They seem to be about equally partial to the mud-flats at the mouth of Mill Creek, the outside sand-beach, and the marshy edges of the various ponds, and even at times the flooded fields of the mainland. As a rule they are shy and difficult to approach.

72. *Totanus flavipes*. LESSER YELLOW-LEGS.

Like its larger congener, the present species is a transient visitor in spring and fall, but is more numerous, at least at the former season, occurring more plentifully, perhaps, than any other shore-bird of equal size. The marshes and mud-flats at the mouth of Mill Creek are a favorite feeding-ground, although it frequents as well the other spots where shore-birds in general are wont to be found. Flocks of this species seldom aggregate two dozen birds, which, unlike those of the larger kind, are as a rule quite unsuspicious, so that it is comparatively easy to secure specimens : on one occasion (May 7, 1900) four were taken at one shot. Mr. Bacon states that they make their appearance usually during the last week in April (April 23, 1900 ; May 4, 1894), the bulk passing through during the first half of May, the latest recorded date being May 24, 1893. Mr. Simpson reports a pair seen at Crystal Point April 26, 1902, while our records for the spring of 1900 (all from the mouth of Mill Creek) ranged between May 1 and 12. In the autumnal movement they are said to reappear some time in August, on one occasion (1901) as early as August 7, lingering

well into October, recorded last dates varying between October 11 (1894) and 14 (1893). We did not, however, meet with them in 1900 at this season save on August 22 and 23, and September 21. It is very evident that this species is not so hardy as the Greater Yellow-legs, its migration being performed during the warmer part of both seasons.

73. *Helodromas solitarius*. SOLITARY SANDPIPER.

The Solitary Sandpiper is regular and common as a migrant, and of casual occurrence as a summer resident, having been noted by Mr. Bacon on various occasions through the summer, of which the following were recorded: July 19, 1892, July 7, 1896, and July 25, 1890. Upon this latter date two specimens were taken, both young birds. Migrants from farther north, however, begin to arrive in August, exact dates lying between August 17 (1901) and 25 (1897). In the fall of 1900 it was first noted (at Mill Creek) August 20, but did not appear to be very common at that season, at least on the Peninsula, where it was observed only on September 13 and 25. The latest fall date given by Mr. Bacon is October 12, 1901. He has observed its arrival in the spring from April 27 (1895) to May 6 (1893). In the spring of 1900 it was first seen May 3, when one was noted at a muddy pool a few miles west of the city. May 8, 9, and 10 were days when a considerable movement took place, the species being met with not only at the mouth of Mill Creek, but about the ponds on the Peninsula as well. It was observed at intervals up to May 24. This species has not been found on a sandy beach, the margins of the ponds on the Peninsula and pools on the mainland being its favorite resorts.

74. *Symphemia semipalmata*. WILLET.

Mr. Simpson is the only observer in this region who has been so fortunate as to meet with this species, whose occurrence here must be considered as very rare or accidental. His account is as follows: "On April 24, 1902, while hunting on the outside beach, I saw two large shore-birds at the very water's edge, standing close together. As there was no cover I kept on as if to pass them, and fired at long range just as they were about to start, with the fortunate result of securing both birds. They proved to be a pair of Willets in full spring plumage, and were pronounced 'Golden Plover' by gunners who saw them, as are also Yellow-legs or any large wader." These specimens are now preserved in Mr. Simpson's collection. Many

years ago (1838) this bird was recorded by Dr. J. P. Kirtland as a common visitor, doubtless breeding, on the shores of Lake Erie in Ohio (*American Journal Science and Arts*, XL., 1841, 24), but there is no recent evidence to substantiate this statement, and the species is certainly rare enough at the present time so far north in the interior.

75. **Bartramia longicauda.** BARTRAMIAN SANDPIPER.

The writer has never met with the present species in this locality, but Mr. Bacon's very full notes admirably supply the deficiency. "This interesting species must be put down as a migrant, rather common in the fall, less numerous in the spring, and of occasional occurrence as a summer resident. Some seasons, as for instance in 1899, it has been quite common in certain localities which it frequents. I have spent many afternoons in the pursuit of these birds, and have concluded that more can be found on a couple of square miles of pasture and farm land, just west of the city of Erie, than in all the remainder of the county. From my own knowledge of the county, and from information given by others, I am led to believe that this bird seldom stops, save on the lake shore plain. Thus, I have never seen one on the Peninsula, and never expect to, for it is a bird of the pastures and clover fields. During spring migrations I scarcely ever see more than one or two pairs, but by July 15, or soon thereafter, I always find a bunch of young birds on their way south, perhaps half a dozen, perhaps two dozen, and, if it happens to be a favorable season, their numbers are soon augmented. It would seem to be the case that a rainy summer with a luxurious growth of weeds and grasses brings but few Bartramian Sandpipers, but let it be hot and dry, with the stubble short, and grasshoppers by the million, then they may be expected in abundance. On June 20, 1897, at Miles Grove, I saw a bird of this species which acted unmistakably the part of a female with young, flying from side to side along a road lined with grain fields, and occasionally alighting within a few yards of me. On June 25, 1899, I saw a single bird, and on May 21, 1890, I saw several, while a female taken May 9, 1900, was nearly ready to nest, so that I think an occasional brood is raised in the vicinity of Erie also. One day while watching a flock take their usual dive preparatory to alighting, I saw one of them strike a telegraph wire, cutting both his neck and his existence off short. My records of the vernal appearance of this species lie between April 11 (1896) and May 1 (1897), while the latest fall date appears to be September 22, 1896." This species has, how-

ever, despite Mr. Bacon's prediction, been taken on the Peninsula, but its occurrence there must be very exceptional indeed. Mr. Simpson writes as follows: "April 26, 1902, during the big storm, flock after flock of Bonaparte's Gulls came in from the main lake over Niagara Pond to the bay, and with one of these flocks came a smaller bird, which upon shooting proved to be a Bartramian Sandpiper."

[*Tryngites subruficollis*. BUFF-BREASTED SANDPIPER.]

One of the rarer shore-birds, which has been recorded, however, from Cleveland, Ohio (Wheaton, *Birds of Ohio*, 1882, 491), and has even been noted as breeding near the Ontario shore of Lake Erie (McIlwraith, *Birds of Ontario*, 1894, 156-157).]

76. *Actitis macularia*. SPOTTED SANDPIPER.

This familiar and ubiquitous bird is an abundant summer resident on the Peninsula, where it doubtless finds suitable nesting grounds in the grassy sand-dunes back from the outside beach, and where it was observed in June of 1897 and 1899. It is found also on the shores of the bay, and about the ponds—anywhere, in fact, wherever water runs or stands, but does not often associate with other shore-birds. It comes from the south in April (April 18, 1900; April 27, 1894). The bulk seems to pass southward by the end of August, but a few usually linger well through September, the last being seen in 1900 on September 23. On May 2, 7, 8, and 9, 1900, it was excessively abundant at the mouth of Mill Creek, flying in flocks, shy and restless, behaving very much as do those of some other shore-birds. The time of its nesting is indicated by a nest with two eggs found by Mr. Bacon, May 24, 1893.

[*Numenius longirostris*. LONG-BILLED CURLEW.]

In early times this species may have been not uncommon on the shores of Lake Erie (*cf.* Kirtland, *American Journal Science and Arts*, XL, 1841, 24), and it may still occur as a casual visitor. Certain gunners have described a bird to the writer which was probably this species, which they claimed to have killed near Erie within late years.]

77. *Numenius hudsonicus*. HUDSONIAN CURLEW.

Occurs as a transient visitant, rare and irregular in late years, although well known to the older generation of sportsmen. It has been seen here in the spring, but most of the reports of its occurrence are for the fall migration. Mr. Bacon has seen but two individuals, on August 1, 1890, and August 27, 1895. Mr. James Thompson has a mounted specimen which he says was taken in the fall, about 1892. The Carnegie Museum has an example said to have been shot in the '80's by Captain J. D. Paasch.

78. **Numenius borealis.** ESKIMO CURLEW.

A very rare fall transient. "A few of these birds are seen every year about the shores of Erie bay, where, in October, 1889, two were shot by Mr. James Thompson, of Erie city." (Warren, *Birds of Pennsylvania*, 1890, 96). A single female in Mr. Sennett's collection taken September 17, 1889, and marked as having been collected by James Thompson and George B. Sennett, is evidently the only basis of the above statement, since Mr. Thompson asserts that the specimens in question passed into Mr. Sennett's possession.

79. **Squatarola squatarola.** BLACK-BELLIED PLOVER.

A transient species, regular and fairly common in the fall migration. Neither this nor the following species have been positively identified in the spring, but on at least two occasions Mr. Bacon has seen a single plover at that season, belonging to one species or the other. August 1, 1890, is his earliest fall record, but ordinarily it does not arrive until about the middle of the month, attaining its greatest abundance in September, and remaining often through the greater part of October, and sometimes even later (November 10, 1894). In the fall migration of 1900 the first was observed August 23, and September 10 and 17 were days of special movement, while the last record for the season was not made until October 31. Small parties are the rule, although single birds are not infrequent, and the outside beach and Horseshoe Pond are its favorite haunts. It has also been observed by Mr. Bacon on the ploughed fields of the mainland. Of the whole number secured but three were adult. These were taken on September 5 and 17—by rare good fortune, as they are very wild as compared with the young, which can usually be approached with little difficulty. This preponderance of immature birds is noted also by Mr. Bacon, who has seen but three or four adults in all, two of which were secured (August 28, 1897; August 17, 1901). He considers the young very indifferent for the table.

80. **Charadrius dominicus.** AMERICAN GOLDEN PLOVER.

In its seasonal distribution this species is like the last. "Taking one year with another," Mr. Bacon writes, "I consider this species much the more abundant of the two. Flocks of from twenty-five to fifty birds used to be seen every season, frequenting the ploughed fields west of the city, arriving soon after September 1, and staying for a week or two. These flocks seemed to be comprised mainly of old

birds, the young being found in pairs and small bunches around the lake beach. I saw two such flocks in September, 1901, the first seen to speak of in several years. The Golden Plover is seldom noted in August, but on August 20, 1896, I shot one old bird. My latest fall note is November 5 of the same year." Very few individuals of this species came to our notice in 1900. The first was observed August 27, a specimen taken September 17, and one seen the following day—all on the outside beach. The last record was that of a bird shot at Crystal Point on September 25. Both birds secured were immature. In 1902 Mr. Simpson shot a specimen on September 27, and on November 18 saw three flying down the bay at some elevation, uttering their peculiar whistle.

81. *Oxyechus vociferus*. KILLDEER PLOVER.

Common as a summer resident, and among the first of the shore-birds to move northward in the spring, arriving some time in March, the exact date varying between March 8 (1898) and 28 (1896). It is not so numerous at this season as many others, however. Moreover, it is practically certain that none breed on the Peninsula, as such a noisy species as this is much in evidence daily on its nesting grounds, and it was not thus observed. A female taken May 17 exhibited signs of breeding, but had evidently come from a distance. The cultivated fields of the mainland afford more suitable nesting facilities. "On April 7, 1888, I found a single egg in a ploughed field. From subsequent experience I think this must have been very early nesting, as the next earliest record is for May 5, 1894, when a nest with four eggs was discovered, while on June 25, 1899, I met with a brood of young" (Bacon). It is in the fall migration that the Killdeer gathers into flocks and visits the Peninsula in large numbers, thronging the outside beach, often in company with other species, noisy, restless, and suspicious. It was already present there August 22, 1900, and on September 8 there was a great flight of this species, to the almost complete exclusion of all other shore-birds. After the first week in October it was noticeably less common, but did not finally disappear until November 12, when one was seen in Big Pond—the only instance of its being met with about the ponds. Mr. Bacon notes an individual seen as late as Thanksgiving Day, November 26, 1891.

82. *Ægialitis semipalmata*. SEMIPALMATED PLOVER.

Save the Sanderling alone, the present species is perhaps the most numerous of the transient shore-birds. May is the month when its

northward movement takes place. In the spring of 1900 its arrival was recorded May 8, and it was observed at intervals until as late as May 28, most frequently at the mouth of Mill Creek, but also on the outside beach and the bay shore. The return movement probably began before August 22 (Mr. Bacon's earliest fall record is August 7, 1901), when the species was already common on the Peninsula, continuing thus until about October 1, after which date it was only occasionally found. A single straggler was shot November 2. It usually appears in flocks of greater or less size, and is fond of the company of other shore-birds.

83. *Ægialitis meloda circumcincta*. BELTED PIPING PLOVER.

This interesting species is to be classed as a summer resident, several pairs nesting annually on the wide stretches of sandy beach on the outer shore of the Peninsula. It was first met with June 17, 1897, when at least two pairs were found by the writer, haunting the outer beach and the shores of Horseshoe Pond, but none were secured. Upon the occasion of the next visit—June 26 and 27, 1899—it was again met with in the same locality, and two specimens were collected. In 1900 it was first noted as early as April 16, although not again until May 2. Several specimens were captured during this latter month, and in a female shot May 24 was found an egg that would have been deposited very shortly, thus settling beyond question the matter of the species breeding here. Mr. Bacon has taken young of the year on July 21, 1892, and August 17, 1901. It was noted in the fall only on August 22 and 23, and September 7, and these records in all probability refer to the same individual, which was shot on the last date. Mr. Simpson noted a bird of this species September 26, 1902, and in Mr. Sennett's collection there are a pair taken May 4, 1875. Its favorite haunts are wide stretches of dry, sandy beach, with which it agrees so perfectly in color that unless in motion it is difficult to distinguish. It runs very rapidly, and is rather shy and hard to approach within range.

84. *Arenaria morinella*. RUDDY TURNSTONE.

The Turnstone occurs sparingly, but perhaps regularly, during the fall migration, and has been observed in the spring also. A specimen shot on the Peninsula August 29, 1893, came into the writer's hands the next day. Single birds were captured in 1900 on August 28, September 5, and September 24, and one was identified, but not se-

cured, on September 25. These records were all either for the outside beach or Horseshoe Pond. Mr. Bacon has met with the species on but a few occasions, and has not seen more than two together. Following are the dates when it has been observed by him: September 5, 1892; May 24, 1893; September 21, 1901; August 30, 1895; August 11, 1896. In addition he speaks of having occasionally examined specimens killed by others, which failed of record in his notes. Mr. Sennett has two specimens: September 12, 1875; August 24, 1889.

85. **Colinus virginianus.** BOB-WHITE; QUAIL.

"A resident species that would be common on the mainland if given a fair chance. The guns and dogs are a little too numerous, however, and an occasional winter with continued cold and crusted snow may seem to exterminate them entirely, but there are always some left, and once or twice they were almost abundant." (Bacon.)

86. **Bonasa umbellus.** RUFFED GROUSE.

A common resident, seemingly better able to hold its own against sportsmen and bad weather than the Quail, provided the timber is not thinned out too much. Wooded hillsides and ravines are its favorite resorts, and even along the wooded bluffs of the lake shore, right up to the city limits, it is seen every fall. Indeed, it even breeds here not infrequently. Mr. A. M. Howes reports having met with a female and brood of young on May 30, 1892, only two miles west of the city. Occasionally it is met with on the Peninsula, but never seems to increase there, although there seems no good reason for such a scarcity as both general report and extended observations indicate, unless it be that the well known abundance of minks, weasels, and birds of prey should account for it. A female with a brood of young was noted along the board-walk by the writer on June 26, 1899, and Mr. Simpson records its occurrence in November, 1902. "On November 27, 1902, I shot the first I ever saw on the Peninsula." (Bacon.)

87. **Ectopistes migratorius.** PASSENGER PIGEON.

Formerly a very abundant species, now almost exterminated. Mr. Bacon writes: "In the year 1889 I met with this bird on two occasions, but have not seen nor heard of it since. June 9 an adult male was shot by a friend, and on July 18 I shot a young bird." These dates and the attendant circumstances would suggest that the species was breeding, and, indeed, it is given by Dr. Warren on Mr. Sennett's

authority as breeding sparingly in Erie County (*Birds of Pennsylvania*, 1890, 111). Mr. Sennett had three males in his collection, two of which are now in the Carnegie Museum; they bear dates of April 3, 1875, March 13, 1876, and April 11, 1876, respectively.

88. **Zenaidura macroura.** MOURNING DOVE.

Common as a summer resident, arriving, according to Mr. Bacon's experience, from March 18 (1898) to 25 (1893), and staying through September. He adds further: "They are also occasionally seen in late fall and even in winter (January 5, 1891). Their abundance is extremely variable from year to year. Thus, in the summer of 1891 they were exceedingly numerous, and I remember seeing as many as five hundred in a single afternoon. Ordinarily, however, it is seldom that more than a half dozen will be seen in an afternoon's tramp through the country. Again, I have found them quite abundant early in July, seemingly all young birds, while two weeks later I could scarcely find a Dove in an afternoon's hunt. Certain fields always have a special attraction for Doves, and on one dry ridge not far from the city I can always start a dozen or two in season, which must, however, be transients, as I never see as many there later on. This species does not occur on the Peninsula as a breeder," the birds seen there being visitors from the mainland. A few were noticed there in the spring of 1900, first on April 2, and thereafter on several occasions until May 2. It was usually found in pairs, haunting the more open places.

89. **Circus hudsonius.** MARSH HAWK.

A summer resident, breeding, Mr. Bacon feels quite positive, on the Peninsula, where it has been seen through the nesting season. It is often seen on the mainland also, and is in fact the most common hawk in this section, save the Sparrow Hawk alone. It has not been observed in winter, but has been noted as early as March 27 (1901). In 1900 it was occasionally seen in the spring from April 10 to May 3, and in the fall from August 26 to October 3. An immature example shot on Big Pond September 29 was the only one secured.

90. **Accipiter velox.** SHARP-SHINNED HAWK.

This hawk is in all probability a summer resident, although so far it has not been certainly detected during the breeding season. It is not uncommon, however, during the spring and fall migrations, especially at the former season. In 1900 the earliest record was for

April 7, and from April 17 to 21 there was a considerable flight, while May 8 was the latest date upon which it was noted. In the fall the first came September 26, and the last was recorded October 23. It seemed to be partial to the open places on the Peninsula, and the sand-dunes bordering the outside beach were a favorite resort. Mr. Bacon has taken specimens in April, May, and October.

91. **Accipiter cooperii.** COOPER'S HAWK.

Apparently not a common species in this section, its seasonal status, both observed and inferred, being the same as that of the last. One was noted in the woods near Big Pond, April 2, 1900; a specimen was secured September 1 at the head of Yellow Bass Pond; and one other was observed September 3. Mr. Bacon has taken specimens March 27, 1901, and April 5, 1902. These seem to be all the records.

92. **Accipiter atricapillus.** AMERICAN GOSHAWK.

This is given by Mr. Sennett as a rare visitor, doubtless in winter (Warren, *Birds of Pennsylvania*, 1890, 125), as might be expected. Further records, however, are very desirable.

93. **Buteo borealis.** RED-TAILED HAWK.

Concerning the Red-tailed Hawk Mr. Bacon writes as follows: "I have seen young birds of this species killed in midsummer, and believe it breeds regularly, although I have had no experience with it myself. March 18, 1901, I secured from Mr. Frank Claus a specimen shot by him on the Peninsula." It doubtless occurs as a permanent resident. Mr. Simpson saw a pair on November 18, 1902, on the outside beach.

94. **Buteo lineatus.** RED-SHOULDERED HAWK.

A summer resident, possibly remaining through the winter, but there are few records for any season. In Mr. Sennett's collection are two specimens, November 7, 1876, and September 14, 1888. Mr. Bacon has secured examples on April 6, 1899, and March 30, 1901. Mr. Simpson noted two birds late in September, 1902. In 1900 a pair were repeatedly observed about the lower end of the board-walk during the last week in March, and on April 3 one which had been shot by a gunner was found in a ducking-blind at Graveyard Pond — doubtless killed two days previously. This pair may have intended nesting in the vicinity, but were not certainly noted thereafter. One other individual observed November 1 constituted our sole remaining record. Mr. A. M. Howes has been so fortunate as to find this hawk breeding, the exact locality being a tract of woods within the curve made

by the Philadelphia and Erie Railroad, on the ridge east of the city. He secured a set of four highly incubated eggs on April 24, 1894, and a second set of three, probably laid by the same pair, on April 5, 1895. Both nests were in trees, thirty-five and forty feet from the ground.

95. **Buteo platypterus.** BROAD-WINGED HAWK.

Recorded by our party on but two occasions, but probably a summer resident. An immature male in moulting plumage was shot near the foot of the board-walk on May 26, and one other was seen September 21. Mr. Bacon mentions having seen one specimen from this locality.

96. **Archibuteo lagopus sancti-johannis.** AMERICAN ROUGH-LEGGED HAWK.

Occurs as a rare winter visitor. One was killed by Mr. Faulkner G. Lynch in the fall of 1900, and on November 4, 1902, Mr. Bacon was so fortunate as to secure a specimen, which is now in the Carnegie Museum.

[*Aquila chrysaetos.* GOLDEN EAGLE.

A species which may be expected to occur here as a casual visitor.]

97. **Haliaeetus leucocephalus.** BALD EAGLE.

This magnificent bird is found here at every season of the year except winter. The writer met with it first on June 26, 1899, when a half dozen individuals were noted about the outside beach, and its presence at such a date naturally led to the inference that it was breeding in the immediate vicinity. This inference was strengthened the following year, when the species was repeatedly observed at dates ranging from April 9 until the end of May. Notwithstanding, nothing is more improbable than its nesting on the Peninsula. Such a large nest would easily be visible at a long distance before the trees were in leaf, but none were discovered, and common report was entirely in accord with our observations. It is said to nest, however, at various points on the mainland along the lake bluff (Northeast, Girard, etc.) but the Peninsula is evidently a favorite rendezvous and feeding-ground. Most of the individuals seen are immature birds, although some are apparently adult. It is no uncommon thing for as many as a half dozen to be in sight at once, sailing about overhead, or perched in a commanding position in some tall tree. They frequent all portions of the Peninsula, but perhaps are most apt to be met with about

Long Pond, where the high timber affords convenient sites for perching, and along the outside beach, where they find abundant food in the shape of dead fish, and, at certain times, large numbers of Long-tailed Ducks cast up on shore. They are at all times shy and difficult of approach, but sometimes fly unwittingly within range. Thus two specimens were secured, on May 14 and 16 respectively, both in the strip of woods at the foot of Ridge Pond. The first had a head and tail of mottled brown and white, the other was a younger bird, with no trace of white. Eagles were not so often observed in the fall months, and none after November 6. Doubtless the freezing over of the lake cuts off their accustomed supply of food, so that they are compelled to move southward for the winter.

[*Falco peregrinus anatum*. DUCK HAWK.

A species which should occur in this locality, casually at least, as Dr. J. M. Wheaton (*Birds of Ohio*, 1882, 423) says it "is not uncommon in the vicinity of Cleveland," while a more recent record from Erie County, Ohio (May 29, 1893, one male shot) is given by Mr. Carl Tuttle (*Auk*, XII, 1895, 191).]

98. **Falco columbarius**. PIGEON HAWK.

Occurs as a transient at irregular intervals in the spring and fall, being perhaps most numerous at the latter season. Mr. Sennett has specimens taken April 26 and September 24, 1875, and September 16, 1877. Mr. Bacon has shot examples on March 28, 1895, October 24, 1896, and May 3, 1900. We did not meet with the species in 1900 save during the fall migration. One shot September 18 by Mr. Simpson was in pursuit of Flickers, which were quite numerous just at that time. A number were seen and one was shot September 20. Others were noted September 27, October 6, and October 26.

99. **Falco sparverius**. SPARROW HAWK.

The present species is the most common hawk of this region, at least on the mainland, and occurs as a summer resident, breeding in suitable situations throughout. It is not very often observed on the Peninsula, however.

100. **Pandion haliaëtus carolinensis**. FISH HAWK; OSPREY.

Of occasional occurrence in the spring and fall. One was noted on May 7, 1900, and once or twice subsequently. It has been noted by Mr. Bacon on the following dates: May 26, 1890; May 30, 1896; April 20, May 4, May 24, 1902. Most of these dates, it will be noted, fall within the known nesting season of the species, and it is possible that it may breed occasionally within our limits, although

there is no positive evidence as yet to this effect. It is known to go sometimes a long distance from its nest in search of food, and the individuals observed may have been nesting somewhere on the mainland. It was seen on August 26 and 29, 1900, also by Mr. Simpson in September of both 1900 and 1902.

[*Strix pratincola*. AMERICAN BARN OWL.]

There are several Erie County records for this owl, but none of them happen to fall within the limits of the present paper. Doubtless it will be detected in due time, however.]

101. **Nyctalops wilsonianus.** AMERICAN LONG-EARED OWL.

Asio wilsonianus, COUES, Check-List, 1882, 81. — A. O. U. Check-List, 1883, 198, and of most recent authors.

Nyctalops wilsonianus, STONE, Auk, XX, 1903, 275.

This owl is no doubt a resident species, but on account of its nocturnal habits is seldom observed, and may be much more common than the records indicate. There are four specimens from Erie in Mr. Sennett's series, taken on the following dates: April 1 and November 13 (two), 1875, and October 19, 1889.

102. **Nyctalops accipitrinus.** SHORT-EARED OWL.

Asio accipitrinus, NEWTON, Yarrell's British Birds, ed. 4, I, 1872, 163. — A. O. U. Check-List, 1883, 198, and of most recent authors.

Nyctalops accipitrinus, STONE, Auk, XX, 1903, 275.

"Occurs as a regular migrant, most numerous in the fall, and some seasons almost common. September 28 (1896) is its earliest recorded autumnal appearance, while the latter part of October marks the arrival of the bulk of the individuals. I have never observed it in the winter, although it may occur occasionally at that season. On the other hand, it is possible that it may breed. Thus, on July 27, 1897, I shot one of these birds in a grassy spot where I have often found them in spring and fall, and again, on July 10, 1902, I found an individual under similar circumstances. Upon the latter occasion I could not induce the bird to leave the locality, although I could find neither nest nor young birds. It is usual to flush these owls in some grassy field or marsh, but on one occasion I surprised one in an apple-tree." To Mr. Bacon's account above quoted the writer can add nothing from personal experience. There are three specimens in Mr. Sennett's collection, two of which were captured on dates that appear to be respectively the earliest fall and latest spring records: September 22, 1875, and April 26, 1875.

103. **Syrnium varium.** BARRED OWL.

A specimen of this owl, taken October 20, 1891, was secured by Mr. Bacon from a gunner, and mounted birds of local origin are often seen in the hands of private parties, so that it is probably regularly distributed as a permanent resident.

104. **Scotiaptex nebulosa.** GREAT GRAY OWL.

A very rare or accidental winter visitor. "Mr. Geo. B. Sennett tells me one was found a few years ago in the smoke stack of a steamboat at Erie city." (Warren, *Birds of Pennsylvania*, 1890, 152).

[*Cryptoglaux tengmalmi richardsoni*. RICHARDSON'S OWL.

Nyctala tengmalmi richardsoni, A. O. U. Check-List, 1883, 200, and of most recent authors.

Cryptoglaux tengmalmi richardsoni, RICHMOND, Auk, XVIII, 1901, 193.

This owl is a very rare winter visitor in the northern United States. An example in the Carnegie Museum, taken in Allegheny County, Pennsylvania, March 12, 1896, by Mr. D. A. Atkinson, is the only known record for the State (see Rhoads, *Auk*, XVI, 1899, 311), but if found anywhere in Pennsylvania it should be at Erie.]

105. **Cryptoglaux acadica.** SAW-WHET OWL.

Nyctala acadica, A. O. U. Check-List, 1883, 200, and of most recent authors.

Cryptoglaux acadica, RICHMOND, Auk, XVIII, 1901, 193.

This diminutive owl is doubtless a resident species, but has been most frequently detected during the colder portions of the year. Its small size and retiring disposition combine to shield it from frequent observation, so that it may be much more common than the available records indicate. Mr. Sennett has two examples, labeled respectively January 3 and June 4, 1875. Mr. Bacon took one specimen October 27, 1888, and has received from other parties individuals captured February 5, 1892, and November 15, 1894, these, with a single bird noted October 18, 1902, comprising all the instances of its occurrence that have come to his notice.

106. **Otus asio.** SCREECH OWL.

Megascops asio, STEJNEGER, Auk, II, 1885, 184.—A. O. U. Check-List, 1883, 200, and of most recent authors.

Otus asio, STONE, Auk, XX, 1903, 275.

Doubtless a permanent resident here as elsewhere, quite common, but not often observed. One was seen April 4, 1900, in a hollow stub on the wooded bluff at the head of the bay. The species was heard calling on the Peninsula near Misery Bay on the evenings of September 30 and November 5. Mr. Sennett has one specimen, March 20, 1876.

107. **Asio magellanicus virginianus.** GREAT HORNED OWL.

Bubo virginianus, BONAPARTE, Geographical and Comparative List, 1838, 6.—A.

O. U. Check-List, 1883, 202, and of recent authors generally.

Asio magellanicus virginianus, OBERHOLSER, Proc. U. S. N. M., XXVII, 1904, 188.

Resident throughout the year, according to Mr. Bacon, in suitable situations in tracts of heavy timber, and probably more plentiful, on the whole, than any other owl, excepting the last species. We did not meet with it in 1900.

108. **Nyctea nyctea.** SNOWY OWL.

A rather rare winter visitor. The following note on its occurrence refers to Northeast, Erie County: "A party on a recent gunning expedition shot a large white or snowy owl near this place that measured five ft. six in. from tip to tip of wings. Only one wing was injured and it was captured alive, and is now on exhibition in a prominent show window. It is the first I have heard of captured in this section for some years." ("A. A. A.," *Forest and Stream*, XXVIII, February 3, 1887, 24.) Mr. Sennett secured two specimens near Erie, one November 22, 1874, "cedars back of lake," the other November 6, 1876, "head of bay." Mr. Bacon has personally seen but one individual (December 22, 1894). Other specimens have, however, come to his notice, killed by various parties on the following dates: April 13, 1895, March 8, 1902, November 3, 1902 (a very white bird), November 18, 1902. Two of Mr. Bacon's specimens and one of Mr. Sennett's are now in the Carnegie Museum.

[*Surnia ulula caparoch.* AMERICAN HAWK OWL.

A species that may occur as an accidental winter visitor in this section.]

109. **Coccyzus americanus.** YELLOW-BILLED CUCKOO.

A summer resident, apparently not very common. The only examples thoroughly identified in 1900 were recorded May 22 and September 21, dates which perhaps represent the approximate time of the arrival and departure of the species.

110. **Coccyzus erythrophthalmus.** BLACK-BILLED CUCKOO.

Like the last a summer resident, and probably the more common of the two species, frequenting the shrubbery and woodland. Specimens were taken May 30 and September 13, 1900, and in Mr. Sennett's collection there is a specimen marked May 11, 1875, which possibly represents an arrival.

111. *Ceryle alcyon*. BELTED KINGFISHER.

"Common as a summer resident from April to November, and on one occasion (January 23, 1895) I saw a single bird in midwinter, after the bay had been frozen for several weeks." (Bacon). It is not very common, however, on the Peninsula during the breeding season proper, doubtless owing to the scarcity of suitable nesting sites. In 1900 it was first observed April 7, and by April 11 had become quite numerous along the bay shore and margins of the ponds. This comparative abundance continued until about the first of May, when the nesting season begins. The only nest discovered was in a low bank on the Peninsula about the middle of the shore of the bay. It was found May 25, but not examined. The species was seen almost daily in the fall up to October 12, and once again November 1.

112. *Dryobates villosus*. HAIRY WOODPECKER.

A permanent resident here as elsewhere throughout its range, preferring heavy timber. An occasional bird is seen on the Peninsula, and Mr. Bacon thinks it is more common than the Downy Woodpecker.

113. *Dryobates pubescens medianus*. DOWNY WOODPECKER.

Like the last, a permanent resident, not uncommon in its chosen haunts, and, except in the nesting season, often associating with other of the small resident and winter resident birds.

114. *Sphyrapicus varius*. YELLOW-BELLIED WOODPECKER.

A transient visitant, noted by Mr. Bacon as being in some years quite abundant in the spring migration. His earliest spring note is March 31, 1893. Mr. Sennett has several specimens, one taken April 10, 1875. According to our observations in 1900 it was tolerably common in the spring, but much more numerous in the fall. The first was seen April 18, but from lack of data the length of its stay cannot be given. In the autumnal movement September 18 was the date of its first appearance, and by September 26 it had fully reached the limit of its abundance, and did not finally disappear until October 12. It was particularly partial to wild cherry trees, and was accordingly most abundant along the board-walk, where these trees are numerous. Mr. Sennett's expressed opinion that the species breeds occasionally (*Birds of Pennsylvania*, 1890, 169) refers in all probability to the interior of Erie County.

[*Ceophlyus pileatus abieticola*. NORTHERN PILEATED WOODPECKER. 1

This woodpecker is not an uncommon species in the interior of Erie County, but Mr. Bacon has never seen or heard of one within six miles of the lake, so that it does not properly come within the scope of the present list, although it may yet be detected. True, there are two specimens in Mr. Sennett's collection, labeled without qualification "Erie", but the correctness of the label in this respect is open to question, not only in view of Mr. Bacon's statement as above, but also because Mr. Sennett himself seems to intimate that this species is found in Erie County only in the vicinity of Lake Pleasant (*Birds of Pennsylvania*, 1890, 171).]

115. **Melanerpes erythrocephalus**. RED-HEADED WOODPECKER.

A common summer resident (on the mainland) from April to October, and occasionally winters here. Mr. Bacon contributes the following note on this point: "On several days in the winter of 1888-89 (December 29, 1888, January 3 and 5, 1889, to be more exact) I observed this bird in small parties of eight or ten individuals each, and there seemed to be some in every woods." The specimens in Mr. Sennett's series bear the following dates, abundantly confirming the general statement: November 6, 14 and 17, 1874; February 25 and May 18, 1875; February 9, 1876; February 11, 1878; September 24 and October 27, 1888. Definite records of this species nesting on the Peninsula are lacking, and, indeed, it would seem not to occur there during the breeding season at all. In 1900 it was first observed April 30, and a number were noted again on May 8 and 9. In the fall it was not detected until September 21, but from that time until the end of the month was very much in evidence, frequenting the tall trees along the board-walk and elsewhere. By October 8 the last had departed.

116. **Centurus carolinus**. RED-BELLIED WOODPECKER.

The seasonal status of this species here is uncertain. It seems to have come under the notice of observers in the northern part of its range mostly in the winter, but this is no indication that it does not occur save at that season, as the writer has satisfied himself in at least one case by persistent work. Its occurrence at Erie is no exception to the general rule, the records resting on four specimens in Mr. Sennett's collection bearing dates respectively of October 6, 10, and November 11, 1874, and February 8, 1876.

117. **Colaptes auratus luteus**. NORTHERN FLICKER.

The Flicker is a common summer resident, not known ever to stay through the winter, although, according to Mr. Bacon's experience, remaining sometimes quite late (November 20, 1897; December 1,

1888), and returning usually in March (March 12, 1898; March 20, 1903). Its arrival was overlooked in the spring of 1900, or at least unrecorded, although a single specimen was taken April 17. In the fall there was an immense movement of these birds beginning about September 15, and continuing to near the end of the month. During this period they were exceedingly abundant, thronging the wooded portions of the Peninsula, and apt to be met with even in the open. Like the Yellow-bellied Woodpeckers, they seemed partial to wild cherry trees, and often a half dozen or more could be seen in one such tree. The species was present in diminished numbers through October, and the last record was of a single bird seen September 17, with a party of Meadowlarks on the sand-barrens near the outside beach.

118. **Antrostomus vociferus.** WHIP-POOR-WILL.

A summer resident species, which, curiously enough, was found by us only in the tract of woodland at the foot of the board-walk, between Yellow Bass and Graveyard Ponds, where it seemed to be not uncommon after its arrival on May 1. Mr. Bacon, however, thinks these birds were transients, as he has seen the species on but two occasions, (September 4, 1899; July 19, 1902), and has heard its notes only on a few occasions in May, and hence considers it rare on both the Peninsula and the mainland during the summer. Mr. Simpson reports having taken a specimen north of Niagara Pond on April 26, 1902.

119. **Chordeiles virginianus.** NIGHTHAWK.

Not uncommon as a summer resident. It is, however, much more numerous during the migrations than in summer, but occasional birds are seen at the latter season, and no doubt it breeds regularly. In 1900 its arrival was noted May 16, and one was seen the next day. The only other record is of a single bird seen and positively identified on September 23, flying over at Crystal Point. This is a very late date indeed. "On May 17, 1894, I observed a flight of these birds, in small parties of from two to six individuals, going eastward along the Lake Erie shore. They seemed to follow at fairly regular intervals, and during the two hours that I was able to observe them, I saw probably one hundred birds. On August 28, 1901, a similar flight was noticed by some of my friends, a peculiar circumstance connected with which was that the birds, although in fall migration, also followed the lake shore to the east, the same course as pursued in the spring." (Bacon).

120. *Chætura pelagica*. CHIMNEY SWIFT.

This species occurs as a summer resident, and perhaps nests on the Peninsula, having been seen by the writer about the lighthouse buildings in June, 1899. It is also rather common in the city, but its first appearance in 1900 was overlooked. In the fall the last was seen September 20, this being, indeed, our only record at that season, but in Mr. Sennett's collection there is a specimen taken as late as October 10 (1874).

121. *Trochilus colubris*. RUBY-THROATED HUMMINGBIRD.

Here as elsewhere in the United States a summer resident, apparently not very common. It was not observed in the spring of 1900 until May 21, but its real arrival probably took place two or three weeks earlier. In the fall it was noted last on September 9.

122. *Tyrannus tyrannus*. KINGBIRD.

A common summer resident on both the Peninsula and the mainland, appearing early in May (May 7, 1893; May 8, 1901, Bacon). In 1900 its arrival was recorded May 3, when a half dozen individuals were seen together at Crystal Point. It was noted but twice in August, and the last was seen on September 1.

123. *Myiarchus crinitus*. CRESTED FLYCATCHER.

A summer resident, not very common, at least on the Peninsula, where it is confined to the wooded ridges. It may possibly be more numerous on the mainland, where it was first observed in the spring of 1900 on May 3, at the "Head." In the fall the latest record was September 10, the period of its stay being thus but little longer than that of the Kingbird.

124. *Sayornis phœbe*. PHŒBE-BIRD.

A common summer resident in this general region, although not actually detected as such on the Peninsula, the character of the ground being unsuited to its needs. However, it was quite common there for a time during the spring migration, and also in the fall to a less extent, haunting the margins of the various ponds. April 3 was the date of its first appearance, and it was recorded as common on April 12. There were two records each for August and September, and the last was seen October 4. Additional records for the spring migration are March 29, 1875 (Sennett), and March 31, 1892 (Bacon).

125. *Nuttallornis borealis*. OLIVE-SIDED FLYCATCHER.

Contopus borealis, BAIRD, Birds of North America, 1858, 188.—A. O. U. Check-List, 1883, 233, and of recent authors generally.

Mutallornis borealis, OBERHOLSER, Auk, XVI, 1899, 331.

A rare transient visitant in this locality. A single female shot by Mr. Simpson, September 18, 1900, in an open grove just east of Niagara Pond, constitutes the only record.

126. **Horizopus virens.** WOOD PEWEE.

Contopus virens, CABANIS, Journal für Ornithologie, III, 1855, 479.—A. O. U.

Check-List, 1883, 234, and of most recent authors.

Horizopus virens, OBERHOLSER, Auk, XVI, 1899, 332.

Fairly common as a summer resident, and noted as such by the writer in June of 1899. The following season its arrival was observed May 14, and it soon became numerous. Although repeatedly noticed in the scattered trees of the eastern end of the Peninsula, it was much more common in the high, thick woods of the central and western portions. There seemed to be a marked movement of this species beginning about September 11, and continuing for about two weeks. During this period it was not unusual to meet with many individuals together in the woods, usually in company with other forest-loving birds, continually on the move in the tree-tops. The time of nesting is indicated by the label of a specimen in Mr. Sennett's collection, dated June 22, 1875, which states that it was taken "with the nest and three eggs."

127. **Empidonax flaviventris.** YELLOW-BELLIED FLYCATCHER.

Occurs as a transient visitant, apparently rare in the spring, but rather common in the fall. The only spring record in 1900 referred to a single bird taken May 26. As early as August 25 it had reappeared, and was noted at frequent intervals up to October 3, the date of its last record in the fall. Its favorite resorts were the tracts of dense shrubbery along the ponds, where it contrived to keep well hidden.

128. **Empidonax virescens.** ACADIAN FLYCATCHER.

The Acadian Flycatcher appears to be a regular and rather common summer resident, both on the mainland and Peninsula. It was first met with by the writer on June 26, 1899, in a dense growth of pines in the rear of the north lighthouse, and here a specimen was secured on May 15 of the following year, constituting the earliest spring record. An old nest was discovered here also. On May 28 it was found quite commonly in the deep woodland along the lake shore near the "Head." This appears to be one of the northernmost localities where this relatively southern species is known to breed regularly. Mr. Sennett has a specimen taken August 20, 1888, but we did not meet with it in the fall.

129. *Empidonax traillii alnorum*. ALDER FLYCATCHER.

This interesting little flycatcher may breed in this locality, but has been certainly detected only during the spring migration, and appears to be quite rare. A single specimen was taken May 26, 1900, in thick shrubbery. Mr. Bacon secured one bird on May 21, 1894.

130. *Empidonax minimus*. LEAST FLYCATCHER.

Tolerably common as a summer resident, at least on the Peninsula. It was first observed in 1900 on May 5, and repeatedly thereafter until the end of the month. It is partial to tracts of shrubbery, as is also the Yellow-bellied Flycatcher, but is more apt to be found on their outskirts and in openings than that species. It was unaccountably rare in the fall, and was noticed then on but two occasions—September 12 and 27.

131. *Otocoris alpestris*. HORNED LARK.

Occurs as a winter resident only, but none have been identified within late years, although special search has been made at the times when it would be expected to occur. Such negative evidence does not, of course, preclude its regular occurrence. There are eight mounted specimens of this form in Mr. Sennett's collection, shot in February and April, and two skins dated respectively February 14 and March 24, 1875. (See Dwight, *Auk*, VII, 1890, 142.)

132. *Otocoris alpestris praticola*. PRAIRIE HORNED LARK.

One of the common and characteristic birds of this general region, where it occurs at all seasons of the year, although it is probable that many or all of the winter individuals come from farther north. It breeds quite early in the season: thus, Mr. Bacon found a nest with eggs March 31, 1896, while another nest discovered by him May 1, 1901, shows that the nesting season is sometimes prolonged. It was noted in the spring of 1900 from March 21, when our observations began, throughout the season, but curiously enough, it was not recorded from the Peninsula until May 31, when an immature example was secured there, all the other records referring to single birds or pairs in open fields on the mainland, or seen flying over. Evidently it breeds here, and retires to the Peninsula with its young when they are able to fly. In June of 1897 and 1899 it was found on the outside beach, in the latter year in great abundance, occurring in small parties, perhaps formed by the union of several family groups, as they were composed largely of immature birds, which were quite tame

and easily approached. In the fall of 1900, too, it was quite abundant here also, particularly in October, associating with the Snow Bunting, but no very large flocks were observed. Through the winter, however, flocks of considerable size are often found on the Peninsula, and even more frequently on the mainland.

133. *Cyanocitta cristata*. BLUE JAY.

The Blue Jay is a permanent resident, and at times very abundant, being one of the few conspicuous birds in the heavy timber of the Peninsula in the early spring, also in the fall, in October. The woodland on either side of Long Pond is a favorite haunt. A nest was discovered in a bushy sapling at the foot of Ridge Pond in May, 1900, but was deserted before all the eggs were laid.

134. *Corvus corax principalis*. NORTHERN RAVEN.

This is given by Mr. Sennett as a straggler, and on the questionable authority of Dr. John W. Detwiller as having been seen once in winter (Warren, *Birds of Pennsylvania*, 1890, 202). Wilson speaks of the Raven "as entirely supplanting the Crow on the southern shores of Lake Erie" (in Ohio), but this was almost one hundred years ago (*American Ornithology*, IX, 1825, 136).

135. *Corvus brachyrhynchos*. AMERICAN CROW.

Corvus americanus, AUDUBON, Ornithological Biography, II, 1834, 317, and of most authors.

Corvus brachyrhynchos, BREHM, Beiträge zur Vögelkunde, II, 1822, 56. — RICHMOND, Proceedings Biological Society of Washington, XVI, 1903, 125.

Common, according to Mr. Bacon, during all but the winter months, and occasionally seen at that season also. It arrives very early in the spring (February 22, 1894; February 28, 1893), and by the end of April the nests usually contain eggs. It was numerous on March 21, 1900, at the inception of our work, feeding about the shores and the edge of the ice at the mouth of Mill Creek, much in the manner of the Herring Gull. A large flock was observed west of the city the same day. Although unquestionably breeding quite commonly on the Peninsula, the only instance that came to our notice was that of a nest found May 9 at the head of Yellow Bass Pond. In the fall it was most abundant in October, and was noted up to November 10. It was frequently found along the outside beach, feeding on living and dead animal matter cast upon the shore. Mr. Bacon contributes the following interesting observation on the feeding habits of this bird: "Once during the summer of 1886 I saw a Crow fly out of an evergreen

with his 'hands full,' so to speak. A shot induced him to drop his burden, which proved to be a Flicker, just at its last gasp. Never before or since have I caught a Crow in the act of killing a bird, and the size of the bird attacked was doubly surprising."

136. **Dolichonyx oryzivorus.** BOBOLINK.

In the meadows of the mainland this species is a very common summer resident, the country being particularly adapted to its needs. Mr. A. M. Howes has a set of four eggs collected near Erie in June, 1894. In 1900 the first migrant of the season was seen May 7 (Bacon), which is a fair average date of arrival. The species was observed on the Peninsula but once in the spring—May 30, when a single male was taken along the edge of Big Pond. In the fall migration a flock of about thirty was noted September 8, in some weeds and bushes at the mouth of Niagara Pond. Mr. Bacon says of it at this season: "They begin to flock early in August, and by the end of the month they can be heard overhead every night on their way southward. I have seen occasional flocks come into the wild rice in the Peninsula ponds, but I think they do not remain here more than one night. They never approach the Red-winged Blackbird in abundance, straggling flocks of from twenty to forty birds being the rule. September 24, 1897, I saw several hundred in a clover field. October 1, 1901, I saw between two and three hundred in a stubble field west of the city. The latter date is very close to the time of the final departure of the species for the south."

137. **Molothrus ater.** COWBIRD.

Common on the mainland as a summer resident from March (March 22, 1893, Bacon) through September (October 1, 1874, Sennett), after which it is seldom seen. It often associates with the Red-winged Blackbird. On the Peninsula it must evidently be quite uncommon, as it certainly entirely escaped notice there in the season of 1900.

138. **Xanthocephalus xanthocephalus.** YELLOW-HEADED BLACK-BIRD.

An accidental visitant from the west. One specimen, a male, was shot by Mr. Bacon August 22, 1896, on the Peninsula near "Big Bend." It was alone.

139. **Agelaius phoeniceus.** RED-WINGED BLACKBIRD.

A very common summer resident, to all appearances breeding quite plentifully on the marshes of the Peninsula, where it was noted by the

writer in June of 1897 and 1899, although no nests were found, either then or in 1900. "The date of its arrival," Mr. Bacon writes, "varies considerably, depending as it does upon the general advance of the season, and has been observed from March 7 (1902) to 30 (1893). In August and September this species resorts by thousands to the Peninsula, going to the ponds containing wild rice late in the afternoon, and starting back to the mainland soon after sunrise. Occasional flocks remain in the ponds through the day, but the main army make the trips to the grain fields and back again daily. In making these trips they follow the neck of the Peninsula at its western end, or else the breakwater pier at the eastern end, seldom crossing the bay where it is of any considerable width. This bird is supposed by most of the gunners to be the 'reedbird' of the game laws, and many are slaughtered annually for food." Their flesh is said to be very good. A curious albinoscent specimen, showing the pattern of the female in a bleached condition, was taken by Mr. Bacon September 19, 1902, and sent to the Carnegie Museum. November 12, 1900, is the latest fall date upon which its presence has been recorded.

140. *Sturnella magna*. MEADOWLARK.

A summer resident, quite common in the meadows and cultivated fields of the mainland, but naturally not found breeding on the Peninsula, where it was only detected occasionally during the fall migration, a few being seen in the sandy barrens bordering the outside beach as late even as November 17, 1900. Mr. Bacon says that it is seen occasionally through the winter months, as for instance on January 1, 1902, although ordinarily it arrives from March 10 (1894, 1898) to 29 (1896, 1899), and remains until November 5 (1896) to 29 (1894).

141. *Icterus spurius*. ORCHARD ORIOLE.

This is given by Mr. Bacon as a regular but not common summer resident, breeding in suitable situations. It was not met with in 1900, but a single individual was detected on the Peninsula June 17, 1897, in open woodland. Mr. Sennett took one specimen May 10, 1875.

142. *Icterus galbula*. BALTIMORE ORIOLE.

Also a summer resident, much oftener seen and better known than the last species, but hardly to be called more than tolerably common. Its arrival occurs early in May (May 6, 1893, Bacon), in 1900 on May 8, when individuals were observed among the shade trees of the

city as well as in the woodland on the Peninsula, and by the middle of the month its normal summer abundance had been reached. It was not observed by us in the fall, probably having passed south before our observations at that season began. August 23, 1888, is the date of a specimen in Mr. Sennett's series.

143. **Euphagus carolinus.** RUSTY BLACKBIRD.

Scolecophagus carolinus, RIDGWAY, Proceedings United States National Museum, VIII, 1885, 356. — A. O. U. Check-List, 1883, 253, and of most recent authors. *Euphagus carolinus*, RICHMOND, Proceedings Biological Society of Washington, XVI, 1903, 128.

A regular but not very common transient visitant, the bulk of the flight passing through in April and October. Two specimens seen and secured April 19, in an open grove east of the city, constituted our only record for 1900. Mr. Bacon's recorded dates of arrival and departure are April 6 (1900) and May 17 (1902) for the spring, and September 27 (1893) and October 21 (1902) for the fall. Mr. Simpson has observed it about the ponds of the Peninsula as late as November 18 (1902). "Its notes, which I have heard once or twice, resemble those of the Bronzed Grackle, but are more subdued." (Bacon).

144. **Quiscalus quiscula æneus.** BRONZED GRACKLE.

Common (on the mainland) as a summer resident from March (March 11, 1902, Bacon; March 14, 1876, Sennett) to September, seldom remaining in any numbers later in the season, although on one occasion recorded by Mr. Bacon as late as November 24 (1888). It is not known to breed on the Peninsula, where, indeed, it is seldom seen at any time. One was shot near the shore of Misery Bay, April 11, 1900. It does not approach the Red-winged Blackbird in abundance, nor does it mix with that species to an appreciable extent.

145. **Hesperiphona vespertina.** EVENING GROSBEEK.

Dr. Warren speaks of having met with this species in Erie County during the season of 1889-90, when, as is well known, it appeared over a vast territory far to the eastward of its usual range (*Birds of Pennsylvania*, 1890, 225). Mr. Bacon says that during this incursion two specimens were shot at Erie, and mounted by a local taxidermist.

146. **Pinicola enucleator leucura.** PINE GROSBEEK.

A rare and irregular winter visitant. In Mr. Sennett's collection there are two specimens, females, taken February 11, 1875. Mr. Bacon includes the species in his list on the strength of a specimen

killed some twenty years ago (1882), one of a flock feeding on the berries of the mountain-ash.

147. **Carpodacus purpureus.** PURPLE FINCH. A regular transient in spring and fall, breeding sparingly however. Mr. Bacon speaks of having heard it in midsummer in a tract of evergreens, and Mr. Sennett has young birds in his collection dated July 12, August 2, and August 6, 1888. May and September seem to be the months when it is most numerous, but it is not impossible that it occurs during colder weather, or even in the winter. May 2 and September 19 were the only occasions upon which it was detected on the Peninsula in 1900.

[*Loxia curvirostra minor.* AMERICAN CROSSBILL.

This species doubtless occurs as an irregular winter visitant, and should have been detected long since.]

148. **Loxia leucoptera.** WHITE-WINGED CROSSBILL.

A winter visitant, rare and irregular. In the winter of 1874-75 there must have been somewhat of a flight here, as Mr. Sennett has four specimens taken during that season: December 17, 1874, January 2 (two) and March 22, 1875. A more recent record refers to a specimen secured alive on the Peninsula about October 20, 1903, by a gunner, who at last accounts still had the bird in captivity, where it appeared to be doing well.

149. **Acanthis linaria.** REDPOLL.

Another winter resident species, possibly of regular occurrence, although it has been detected so far during two seasons only. There are seven specimens in Mr. Sennett's collection, all taken in February, 1875 (February 4, 5, 24, 25 and 26). Mr. Bacon has met with the species but once—March 31, 1893—when a small flock was seen on the Peninsula, in the tops of some young poplars, and one specimen was secured.

150. **Acanthis linaria rostrata.** GREATER REDPOLL.

Also a winter resident, a single specimen having been obtained by Mr. Bacon from the flock of Redpolls seen March 31, 1893, as noted above. Under the circumstances it would of course be impossible to say in what proportion the two forms were. The present record seems to be the first for Pennsylvania.

151. **Astragalinus tristis.** AMERICAN GOLDFINCH.

A common species in the more open woodland areas, occurring—save in the nesting season—in scattered flocks of greater or less extent.

It is a permanent resident throughout the year, but is less commonly observed, however, in the winter.

152. **Spinus pinus.** PINE FINCH.

The Pine Finch is to be classed as a migrant or possibly a winter resident, apparently not common. On May 24, 1900, a flock of fifteen or twenty were met with in the scattered trees north of Misery Bay, and two specimens were shot.

153. **Passerina nivalis.** SNOW BUNTING.

An abundant and regular winter resident, more numerous, however, in late fall and early spring than in the depth of winter. They throng the outside beach in flocks of from a few birds up to a hundred or more, while stray individuals are occasionally found along the shore of the bay. Sometimes they are found associated with Prairie Horned Larks, but as a rule they keep separate. They usually keep close to the edge of the water, and although not especially shy, are very restless and erratic in their movements, flying in a jerky, hesitating fashion, as if about to alight every instant. For a species of such cold weather proclivities, the date of its arrival in 1900—October 17—seems remarkably early, yet by October 22 it was already recorded as common. That this is not exceptional, however, is shown by Mr. Bacon's record of the same date in 1892, and of October 21 in 1901, as the time of the first fall appearance of the species in those years, while Dr. Warren says that in 1889 one was shot as early as October 12 (*Forest and Stream*, XXXIV, February 13, 1890, 64). He speaks also of having seen a flock of two hundred and fifty or three hundred birds near the Soldiers' Home in November of the same year. Mr. Bacon mentions that they are often seen on the fields of the mainland as well as on the Peninsula during their sojourn, which lasts until sometime in March.

154. **Calcarius lapponicus.** LAPLAND LONGSPUR.

Dr. Warren's statement that this species is a tolerably common and regular winter visitor about Lake Erie (*Birds of Pennsylvania*, 1890, 233) is not fully confirmed by the available evidence. Mr. Sennett took at least three specimens on October 3, 1889 (see Warren, *Forest and Stream*, XXXIV, February 13, 1890, 64), and two on March 25, 1875, these two dates being respectively the earliest for the fall and latest for the spring. Mr. Bacon first detected it on March 3, 1894, when a flock of a half dozen was seen and one specimen

secured. No more were met with until February 28, 1902, when a few were found in a field west of the city, and two specimens taken the following day. Again, in 1903, on March 11 and 13, still others were found, and on this occasion five specimens were taken. Two examples were secured on March 8, 1904. "They seem to be much wilder and more difficult to procure than the Snow Buntings, with which they often associate." Future research may show that this bird occurs regularly every season, but the above are all the known records. Doubtless it is found also through the months intervening between October and March.

155. *Pooecetes gramineus*. VESPER SPARROW ; GRASS FINCH.

"A summer resident, common, arriving the latter part of March (March 31, 1893), and soon becoming numerous. Nests have been found as early as May 7 (1893), and as late as July 2 (1892), in the latter case possibly a second nesting." (Bacon.) It was observed on the sandy barrens of the Peninsula on April 18, 1900, in straggling flocks, reminding one of those of the Slate-colored Snowbird in their behavior. In the fall the last bird was noted October 27.

156. *Passerculus sandwichensis savanna*. SAVANNA SPARROW.

Possibly a summer resident on the mainland, and so given by Dr. Warren on Mr. Sennett's authority (*Birds of Pennsylvania*, 1890, 234), but the exact locality is indeterminate. The only specimen in Mr. Sennett's collection is dated September 12, 1875, and by all other observers it has been noted only as an uncommon transient in the autumnal migration. The writer shot a specimen on the breakwater August 30, 1893, and Mr. Bacon took specimens on September 16 and 30 of the same year. In the season of 1900 it was noted on September 6, 14, and 15, specimens being secured on each occasion. The sand-barrens along the outside beach were its chosen haunts at this season.

157. *Coturniculus savannarum passerinus*. YELLOW-WINGED SPARROW.

In a section such as this, so well adapted to its needs, the present species would be expected as a common summer resident, frequenting the open country of the lake shore plain. It is mentioned as breeding by Mr. Sennett (*Auk*, VI, 1889, 198) in such a way as to leave the inference that the circumstance deserves special remark, and, indeed, it is given as a rare breeder in this section on the authority of the same observer (Warren, *Birds of Pennsylvania*, 1890, 235).

It came under our notice but once, May 28, 1900, when one was seen in a meadow near the "Head." Mr. Sennett has two specimens, taken August 7, 1888.

[*Ammodramus henslowii*. HENSLOW'S SPARROW.]

Careful search was made for this sparrow on the Peninsula, which abounds with spots suited to the bird's needs, but without success, and it remains one of the species yet to be detected.]

158. **Ammodramus nelsoni.** NELSON'S SHARP-TAILED SPARROW.

This little-known sparrow was added to the avifauna of Pennsylvania on September 23, 1893, when a single bird was taken at the mouth of Mill Creek by Mr. Bacon. This remained the only record up to the season of 1900, when our field work showed it to be a rare spring but quite common fall transient visitant on the Peninsula. A single specimen taken in Niagara Pond May 24 was the only spring record. In the fall it was first certainly identified September 13, and was probably seen several days previous to that date, while there are no records later than October 6. Although found about nearly all of the ponds, Niagara and Big Ponds were its favorite resorts. The birds were wont to frequent the thin growth of rushes along the water's edge, where they would run and skulk and hide with the utmost dexterity, flushing only when closely pressed, and soon dropping down again, sometimes flying back to the growth of weeds and bushes adjoining. In such cases they were usually easily secured by noting where they alighted and "squeaking" them up into sight. While there is no reason apparent why this species should not pass the summer here, it is unlikely that it does so, judging from our present knowledge of its distribution at that season, from which it appears to be extremely local.

[*Chondestes grammacus*. LARK SPARROW.]

The eastward extension of the range of this species along the lake shore plain from Ohio to Pennsylvania may reasonably be expected. It has been found breeding at Oberlin, Ohio (McCormick, *Auk*, IX, 1892, 397).]

159. **Zonotrichia leucophrys.** WHITE-CROWNED SPARROW.

A tolerably common spring and fall transient. May 1, 1894, is the earliest available date in the spring, while a specimen secured May 17, 1900, constitutes the latest date, as well as the only occurrence observed by us at that season. The first was seen in the fall September 19, and the migration lasted about two weeks, or until October 3. At this time it was fond of tracts of bushes and shrub-

bery in the more open situations, and was particularly numerous in some such growth north of Horseshoe Pond.

160. *Zonotrichia albicollis*. WHITE-THROATED SPARROW.

Like the last a transient visitant, but much more numerous, being fairly common in the spring and abundant in the fall. At the former season it was first observed April 18 in 1900, reaching its maximum abundance May 2, and disappearing May 10. May 13, 1892, and May 15, 1875, are the latest spring records given by Messrs. Bacon and Sennett respectively. On its return the first record was for September 15, and the last for October 29, its stay being thus about six weeks, for much of which period it was one of the most abundant of the smaller land-birds, swarming everywhere in suitable covert, as for instance all along the board-walk. October 28, 1888, is the date of a late fall migrant in Mr. Sennett's collection.

161. *Spizella monticola*. TREE SPARROW.

Abundant as a winter resident, probably more numerous, on the whole, than any other native bird at that season, haunting the many and extensive tracts of shrubbery, bushes, and weeds on the Peninsula, and found usually in straggling flocks of greater or less extent, often associated with other species of kindred haunts and habits, as the Slate-colored Snowbird for instance. None were noticed later in the spring of 1900 than April 18, while the first fall record fell on November 5, although the real arrival was probably earlier by a week or more, as indicated by a specimen in Mr. Sennett's collection taken October 26, 1889. An interesting albino was shot April 16, 1900: it was a dirty white color, shaded with light russet brown on the wings, tail, and back, the whole plumage being much worn.

162. *Spizella socialis*. CHIPPING SPARROW.

A very common summer resident in the cultivated grounds of the mainland, but not observed as such on the Peninsula, where it was noted in the fall migration only, in September and early October. April 3, 1892, is Mr. Bacon's earliest recorded spring appearance, and October 27, 1888, is the latest fall record afforded by Mr. Sennett's collection. On May 30, 1888, Mr. Bacon found three nests of this species built on the ground (*Oölogist*, Albion, N. Y., VI, 1889, 134). "They were all in orchards, in long grass."

163. *Spizella pusilla*. FIELD SPARROW.

Also a summer resident, which, like a number of other species, is far more numerous on the mainland than on the Peninsula during the nesting season. It was quite common and in full song on the sand-barrens of the Peninsula on April 18, 1900, and doubtless arrived considerably earlier. Here, too, it was rather numerous during the fall migration, in October, the last being seen October 26.

164. *Junco hyemalis*. SLATE-COLORED SNOWBIRD.

This is perhaps best classed as a winter resident, although it is comparatively seldom seen in the depth of winter, seeming to retire farther south at that season. It is very abundant in the spring and fall migrations, particularly on the Peninsula, the locality being well adapted to its needs. It is found usually in straggling companies in the waste tracts, or on the edges of shrubbery and woodland, associated with Tree Sparrows, Golden-crowned Kinglets, Black-capped Chickadees, and others. In the spring of 1900 the last was observed May 5, and on its return the first was noted September 19, although it was scarcely common until the first week in October. However, its numbers during this latter month varied considerably from day to day, the fluctuations perhaps being due to migratory movements. In the spring of 1903 the last was noted May 7 (Bacon).

165. *Melospiza cinerea melodia*. SONG SPARROW.

This familiar species is abundant on both the Peninsula and mainland, wherever there is suitable covert. An occasional bird may be seen through the cold season, so that no doubt a few winter regularly, but the bulk of the species is made up of summer residents only, coming north some time in March, when they are in full song. A nest with five eggs was found early in May, 1900, placed on the ground in the marsh at the mouth of Mill Creek.

[*Melospiza lincolni*. LINCOLN'S SPARROW.]

Little can be said of this species as a Pennsylvania bird. It is of such a retiring disposition, and passes through in spring and fall so quickly and quietly, that it is easily overlooked. It doubtless occurs here as a transient.]

166. *Melospiza georgiana*. SWAMP SPARROW.

This sparrow is a common and characteristic species of the marshes on the Peninsula, where it occurs as a summer resident, haunting the thick bushes near the margins of the ponds, and the growth of flags and cat-tails in moist places, where it generally keeps well hidden.

April 24 was the day of its recorded arrival in 1900, when it was already common and in full song. Through September it was very numerous, and the last was noted October 6. Additional dates of interest relating to its migration are April 20, 1902 (Bacon), and October 6, 1888 (Sennett).

167. *Passerella iliaca*. FOX SPARROW.

A rather uncommon transient visitant, inhabiting the densest shrubbery and tangle, usually with other small birds of kindred tastes, and very retiring in its disposition. The only spring records in 1900 are of single specimens secured respectively on April 13 and 18. Mr. Bacon has noted it on the following dates: April 18, 1893, April 11, 1895, and April 25, 1901 — the last being the latest spring record, while a specimen in Mr. Sennett's collection marked April 4, 1874, is the earliest date for that season. In the fall of 1900 October 5 and November 5 were extreme dates. Mr. Simpson reports a specimen taken as late as November 12 in 1903.

168. *Pipilo erythrophthalmus*. TOWHEE.

A summer resident, apparently only tolerably common during the breeding season — at least on the Peninsula — but much more numerous during the migration, frequenting the woodland thickets. "March 10, 1894, I saw a pair, which date I consider very early. A more usual date of arrival is March 31, 1899." (Bacon.) In 1900 none were noted until April 18, when it was present in some numbers. In the fall the last was noted October 11.

169. *Cardinalis cardinalis*. CARDINAL GROSBEEK.

A rare species so far north. Mr. Bacon is the only observer who has met with it here. "A single pair of this species is all that I have seen or heard. This pair raised a brood of young in the summer of 1892, in a thicket bordering the lake bluff, about five miles west of Erie. On August 18 I was shown the nest, containing at that time three young birds, and both parents were seen in the trees near by." It would be interesting to know where these particular birds spent the winter.

170. *Zamelodia ludoviciana*. ROSE-BREASTED GROSBEEK.

A summer resident, not very common, at least on the Peninsula, where, in 1900, it was first observed May 10 in the spring, and last on September 19 in the fall. Mr. Bacon thinks it is more common away from the lake. May 4, 1892, is his earliest date. The latest

record is furnished by a specimen in Mr. Sennett's collection, labeled September 21, 1889.

171. **Cyanospiza cyanea.** INDIGO BUNTING.

Of regular occurrence as a summer resident, although not common. May 9 was the date of its appearance in 1894 (Bacon). Curiously enough, we did not meet with this species on the Peninsula in 1900, although the locality seems an ideal one for its presence.

172. **Spiza americana.** BLACK-THROATED BUNTING.

This species is admitted to the list on the strength of the following note, contributed by Mr. Bacon: "On several occasions I have seen and heard a bird that I have identified as this species, which is therefore to be counted a rare summer resident. June 9, 1895, I saw one singing and heard two others."

173. **Piranga erythromelas.** SCARLET Tanager.

Tolerably common as a summer resident, frequenting the wooded portions of the Peninsula and mainland. It arrived May 8 in 1900, and reached the height of its abundance May 20. In the fall the last (and only one) was seen September 26. These dates are probably a fair average index of the arrival and departure of the species. Several nests have been found by Mr. A. M. Howes in the woodland along the bluff facing the lake, west of the city. In every case they were built on the horizontal branches of hemlock trees in deep woods, and May 30 usually found the sets complete.

174. **Progne subis.** PURPLE MARTIN.

"A summer resident, nesting commonly in the city limits in boxes provided for the purpose. Observed dates of first appearance are April 15, 1892, and April 13, 1893." (Bacon.) It is seldom seen on the Peninsula. A female was taken there May 29, 1900, and in the fall migration two birds were observed August 24.

175. **Petrochelidon lunifrons.** CLIFF SWALLOW.

In suitable situations on the mainland this species is a rather common summer resident, but on the Peninsula it occurs only during the migrations. It was quite numerous in the vicinity of Big Pond on April 24 and 25, 1900, in company with other swallows. In 1902 Mr. Simpson noted it first on April 26.

176. **Hirundo erythrogaster.** BARN SWALLOW.

Like the last a common summer resident on the mainland, but found on the Peninsula only during the spring and fall migrations. Mr.

Simpson reported it in 1902 on April 26. In the spring of 1900 it was first noted April 25, as a prominent component of a considerable flock of swallows observed near Big Pond. In the fall August 24 and 25 were days of considerable movement, and it was recorded thereafter at intervals until as late as September 18. An immature specimen taken by Mr. Bacon July 25, 1895 (now in the National Museum, Biological Survey Collection), is an almost perfect albino, showing on the upper parts merely a light wash of rusty.

177. *Iridoprocne bicolor*. WHITE-BELLIED SWALLOW.

This hardy swallow was the first to put in an appearance in the spring of 1900, arriving as early as April 9, and soon becoming numerous, frequenting the bay and ponds in search of its insect prey. Usually several birds were observed together, and on April 24 and 25 a considerable number were found flocking in the vicinity of Big Pond, accompanied by three other species of swallows. While it is quite probable that this species breeds on the Peninsula occasionally, the evidence is inconclusive. It was noted as late as May 19, however, and was present in the fall movement August 21, although the last individual of the season was not observed until September 21, a month later. Conclusive evidence of the nesting of the present species in this locality is afforded by Mr. A. M. Howes, who states that on June 7, 1893, he took *seven* eggs from a bird-box in the rear of his home in the city. Three birds were seen, and from the fact that on two consecutive days two eggs were laid he thinks that the male must have been a bigamist.

178. *Riparia riparia*. BANK SWALLOW.

A common summer resident, very plentiful in certain favorable localities. It was first noted in the spring of 1900 on April 25, as the least numerous of the flock of swallows seen near Big Pond on that day. On May 28 a nesting colony on the mainland a few miles west of the city was visited, where perhaps five hundred pairs were breeding. Their burrows were excavated in the sandy banks of a deep ravine leading to the lake shore, usually near the top, and in certain favorable spots the face of the bluff was very thickly punctured indeed, while the birds coming and going and hovering in the air were a pretty sight. Apparently no eggs were laid at this time, although no nests were actually examined. Some of the birds were seen carrying in nesting material, however. As a rule the birds entered their holes in pairs, but in more

than one case three individuals were seen to enter the same opening in rapid succession. Of ten specimens shot indiscriminately all but one proved to be males. Mr. Simpson's first record for this swallow in 1902 was for April 26.

179. **Stelgidopteryx serripennis.** ROUGH-WINGED SWALLOW.

According to Mr. Simpson, some were seen with other swallows during the storm of April 26, 1902. Whether these birds were blown out of their course, or whether the species is an occasional summer resident here can only be conjectured.

[*Ampelis garrulus.* NORTHERN WAXWING.

Here, if anywhere in the State, should this species be detected as a casual winter visitant.]

180. **Ampelis cedrorum.** CEDAR WAXWING.

A permanent resident the year round, nesting in every orchard. When seen in winter it is in good-sized flocks, haunting mountain-ash trees. Such flocks have been rather rare, however, Mr. Bacon adds, in the last five years. On the Peninsula it is quite numerous, and is often seen about wild cherry trees in the fall months.

181. **Lanius borealis.** NORTHERN SHRIKE.

"A winter resident, but more apt to be met with in late fall and early spring than through the colder months. I scarcely ever see more than a half dozen in any one year. It has been recorded upon the following dates in winter: February 5, 1888; December 24, 1893; January 21, 1894. September 21, 1892, is my earliest fall record, and March 18, 1893, the latest date in spring." (Bacon.)

182. **Lanius ludovicianus migrans.** MIGRANT SHRIKE.

Lanius ludovicianus migrans, WM. PALMER, Auk, XV, 1898, 248.

One of the characteristic birds of this region, where it is a common summer resident on the mainland, and occasional during migrations on the Peninsula, where, in 1900, it was first seen April 3, while single birds, presumably of this species, were noted October 13, 17, and 18. Mr. Bacon says that it starts nest-building immediately upon its arrival, and that he has found the eggs as early as April 15 (1890). Mr. A. M. Howes reports having secured three sets of six eggs each on April 21, 1900. Dr. Warren gives a detailed account (*Birds of Pennsylvania*, 1890, 261-262) of the nesting of this species here as observed by Mr. Sennett and himself on May 20 and 21, 1889, at which date most of the nests contained young. The nests are almost invariably built in thorn or wild crab-apple trees in more or less open

situations. The following note on the feeding habits of this species is contributed by Mr. Bacon: "In the summer of 1886 I saw one of these shrikes kill a Yellow Warbler, and on May 10, 1891, I saw a White-throated Sparrow impaled on a thorn, with a shrike perched near by, so that it would seem that occasionally this species preys upon small birds as does the Northern Shrike."

183. **Vireo olivaceus.** RED-EYED VIREO.

Very abundant as a summer resident, more numerous, indeed, than ever observed elsewhere by the writer, and perhaps the most common and generally distributed small bird on the Peninsula, frequenting the woodland and shrubbery. It was first recorded in 1900 on May 12, becoming common a few days later, and not disappearing until September 27. Many old nests were observed. Mr. Bacon says it often nests in the shade trees in the city.

184. **Vireo philadelphicus.** PHILADELPHIA VIREO.

Fairly numerous as a transient visitant in spring and fall, having been observed in the former season, in 1900, at dates ranging from May 14 to 23, and in the latter from September 6 to 25. Its favorite haunts were bushes and shrubbery, where its deliberate motions distinguished it from the warblers, with which it was wont to associate, and its brighter colors and smaller size from the more common Red-eyed Vireo. It could be approached very closely, manifesting no fear. Its song was not heard.

185. **Vireo gilvus.** WARBLING VIREO.

Probably occurs as a summer resident on the mainland, perhaps nesting in the shade trees in the city, where it was noted on May 12, 1900. It was observed on the Peninsula in the fall only, on September 1 and 12. Mr. Sennett has a specimen taken as late as September 21 (1888).

186. **Vireo flavifrons.** YELLOW-THROATED VIREO.

Doubtless a summer resident, but not very common. One shot May 4 was the first of the season in 1900, and the only one observed by us on the Peninsula. On May 28 a number were seen in a strip of woods along the lake shore near the "Head," where they were apparently settled for the season. In 1892 Mr. Bacon noted two specimens on May 1.

187. **Vireo solitarius.** BLUE-HEADED VIREO.

A transient visitant, not common. In 1900 it was detected only in the fall migration. One was taken in shrubbery along the board-walk September 27, and another was seen in a similar situation October 1. Mr. Simpson reports having met with it on April 26, 1902.

[*Vireo noveboracensis.* WHITE-EYED VIREO.

This vireo is exceedingly rare throughout western Pennsylvania. The writer has never met with it anywhere in this section, but it is as apt to occur at Erie as elsewhere in the region. It is said to be fairly common at Jefferson, Ashtabula County, Ohio (Jones, *Birds of Ohio*, 1903, 171).]

188. **Mniotilta varia.** BLACK AND WHITE WARBLER.

Although not actually observed during the breeding season proper, there can be no doubt that this species is a summer resident, not, however, very common. In 1900 it was noted first on April 28, and the last was recorded September 21. Mr. Bacon has taken specimens on May 1, 1892 and 1894, and Mr. Simpson shot one April 26, 1902.

[*Helminthophila pinus.* BLUE-WINGED YELLOW WARBLER.

Dr. Warren speaks of having met with this warbler in summer in Erie County (*Birds of Pennsylvania*, 1890, 276), but the exact locality is not stated, and the record cannot therefore be used. Moreover, in the absence of specimens it would seem as if the record were open to doubt. This is one of the very rarest warblers in western Pennsylvania, and that it should breed so far north as Erie County seems highly improbable.

Helminthophila chrysoptera. BLUE GOLDEN-WINGED WARBLER.

It was surprising not to meet with this warbler at Erie, in view of its comparative abundance in the western part of the State in general. Doubtless future observations will discover its presence.]

189. **Helminthophila rubricapilla.** NASHVILLE WARBLER.

A transient visitant, possibly not uncommon, although it has been definitely recorded but twice. Mr. Bacon secured two specimens May 9, 1892, and Mr. Simpson shot one along the board-walk September 27, 1902.

190. **Helminthophila celata.** ORANGE-CROWNED WARBLER.

One of the surprises connected with the work in this locality during 1900 was the discovery of this species—not an isolated record, as is usually the case in the Eastern United States, but several occurrences, seeming to indicate that it is a regular although uncommon fall migrant. It was first brought to light by Mr. Simpson, who secured a specimen near Big Pond on September 15. On October 6 one was observed

just east of Niagara Pond, which eluded capture, but later in the day a fine adult was seen and shot along the board-walk. It was skipping about in the tops of the bushes, very active in its movements, and easily distinguishable from the hordes of Yellow-rumped Warblers that were migrating at the same time. Another was observed October 8, and two more, one of which was taken, on October 10. If it be permissible to draw a conclusion from such meagre data, it would seem that the present species is one of the later migrants among the warblers.

199. **Helminthophila peregrina.** TENNESSEE WARBLER.

Recorded as a rather uncommon migrant in the spring of 1900, when it was observed on May 21, 22, and 23, one or two individuals on each day. It kept high up in the terminal foliage of the trees in woodland, where, being so deliberate in its movements, it was difficult to discern, although its song, so penetrating and distinctive, was invariably a sure clue to its presence.

192. **Compsothlypis americana.** PARULA WARBLER.

Probably a summer resident species. In 1900 it was first observed at the surprisingly early date of April 19, when a single bird was taken on the wooded ridge southeast of the city, accompanied by chickadees, nuthatches, kinglets, and the like. No others were seen until April 30, while by May 4 it was recorded as rather common on the Peninsula. May 28 it was found in a tract of hemlocks along the lake front a few miles west of the city, seemingly settled for the season, and, indeed, there is no reason why it should not be a regular summer resident in such places, here as farther south. The time of its departure is indicated by a specimen in Mr. Sennett's collection bearing date of October 3, 1875. Mr. Bacon notes two specimens taken May 2, 1891. The two examples secured by us (April 19 and 30), although doubtless transient individuals, are considered by Mr. Harry C. Oberholser to be indistinguishable from the true *Compsothlypis americana*.

193. **Dendroica tigrina.** CAPE MAY WARBLER.

Occurs as a rare spring and fall transient visitant. Two specimens were secured, both in shrubbery north of Misery Bay, a female May 16, and a male September 12. Mr. Simpson took a female along the board-walk September 27, 1902. There are also two specimens in Mr. Sennett's collection, a male labeled May 13, 1890, and an immature male September 22, 1888.

194. *Dendroica æstiva*. YELLOW WARBLER.

Abundant as a summer resident, especially on the Peninsula, finding congenial haunts in the many tracts of bushes and low shrubbery. Mr. Simpson noted it in 1902 on April 26, but in 1900 the first was observed April 30, and the next day it was common and musical. Several nests were found the latter part of May, some containing eggs. It was last seen August 31, being thus among the earliest species to leave for the south.

195. *Dendroica cærulescens*. BLACK-THROATED BLUE WARBLER.

A spring and fall migrant, not very common, frequenting the shrubby and wooded growths on the Peninsula, doubtless on the mainland also. The first came May 7 in 1900, and it was seen at intervals up to May 18. In the fall its migration was not so hurried, as it extended from September 6 up to as late as October 2. It was if anything more numerous at the latter season. Mr. Bacon's earliest spring note is May 7 (1893) — the same as our own — while Mr. Sennett's collection contains specimens taken as late in the month as May 18 (1889) and 20 (1875). The second and third week in May include practically all the available spring records.

196. *Dendroica coronata*. YELLOW-RUMPED WARBLER.

A common winter resident and abundant transient. We were somewhat surprised to meet with this warbler in considerable numbers at the commencement of our work (March 21), associated with Black-capped Chickadees and Golden-crowned Kinglets, haunting the growth of pines and shrubbery near the north lighthouse, where there was shelter from the wind. They proved unusually shy and difficult to obtain, but such specimens as were secured were just entering upon the prenuptial moult, and their fat was of a peculiar consistence, evidently derived from the wax of the bayberry (*Myrica Carolinensis*), which abounded in the locality, and upon which the birds were doubtless subsisting. There can be no reasonable doubt that they pass the entire winter here, where there is such protection from the weather and such a plentiful supply of food. The influx of transient individuals from the south did not begin until about April 28, and the bulk passed through the first week in May, when they were the most numerous of the non-breeding warblers. None were seen after May 15. In the fall they reappeared September 18, becoming common in about a week, thronging the shrubbery and bushes, and outnumbering

every other warbler, even the Black-poll. This migration came to an end in October, when the species was left in its normal numbers for the winter, being recorded up to November 17. Additional migration dates culled from specimens in Mr. Sennett's collection are May 14, 1875, and September 20, 1888.

197. ***Dendroica maculosa*.** BLACK AND YELLOW WARBLER.

Presumably a summer resident, if not on the Peninsula, then in the hemlock woods of the lake shore bluff, where the conditions are seemingly favorable. However, it has been detected only during the migrations, spring and fall, having been rather more numerous at the latter season in 1900. May 15 was the apparent date of its vernal arrival, and none were seen later than May 25. May 8, 1875, is the date of an example in Mr. Sennett's collection. In the fall it was observed as early as August 30, soon reaching the height of its abundance, and lingering until October 1. It is an inhabitant of the woodland and shrubbery during its stay.

[*Dendroica cerulea*. CERULEAN WARBLER.

This species may occur at Erie, as it has been found both to the west and east, in Ohio and New York (compare Jones, *Birds of Ohio*, 1903, 180-181, and Davison, Auk, V, 1888, 430). Farther south in Pennsylvania it is a common summer resident (Todd, Auk, VIII, 1891, 238).]

198. ***Dendroica pensylvanica*.** CHESTNUT-SIDED WARBLER.

A summer resident species, moderately common on the Peninsula in the scrub growth to which it is so partial in the breeding season. It was first observed in 1900 on May 12, and noted at frequent intervals during the remainder of the month. In the fall, however, it was recorded but once, an immature example having been taken on September 14. It was observed also in June, 1897. Following are some of Mr. Bacon's dates for the migration of this species: May 12, 1891, May 14, 1892, May 13, 1893. Mr. Simpson saw one as early, however, as April 26, 1902.

199. ***Dendroica castanea*.** BAY-BREASTED WARBLER.

One of the rarer migrants, detected in 1900 in the spring only, single specimens having been taken on May 14, 18, and 21, all in the wooded growth north of Misery Bay.

200. ***Dendroica striata*.** BLACK-POLL WARBLER.

Occurs as a transient visitant, common in the spring, more abundant in the fall. At the former season it is among the last of the warblers to migrate, not appearing (in 1900) until May 14, while it was still

present on May 31, when our spring observations were concluded. It reappeared August 30, and doubtless remained well through October, although on this point data are unfortunately lacking. For a time at this season it was the most numerous of the warblers, but later was perhaps exceeded in number by the Yellow-rumped Warbler. Mr. Sennett's collection contains one specimen taken October 11, 1878; doubtless, however, the species often remains somewhat later in the fall.

201. *Dendroica blackburniæ*. BLACKBURNIAN WARBLER.

This dainty warbler occurs in moderate numbers during the migrations in spring and fall, being perhaps most numerous at the former season in 1900, when it arrived May 7, and was seen at intervals up to May 22. In the autumnal movement it was the earliest warbler to appear, coming August 21, and being noted several times thereafter until the end of that month, while the last was observed as late as October 2. It is more partial to high woods than some of the other warblers, rarely descending close to the ground. May 10, 1875, is the date of a specimen in Mr. Sennett's collection.

202. *Dendroica virens*. BLACK-THROATED GREEN WARBLER.

Probably breeds in the coniferous woods of both the Peninsula and the mainland, as is the case farther south, but all our notes seem to refer to transient individuals. It was recorded at the remarkably early date of April 19, when a single one was seen and secured on the wooded ridge southeast of the city, in a flight of Black-capped Chickadees, Golden-crowned Kinglets, Snowbirds, and the like. It was not again observed until April 30, but was seen subsequently at intervals, the last on May 21. In the autumnal migration the first record referred to a bird picked up August 24 on the outside beach, perhaps exhausted and drowned in attempting to cross the lake. September 14 the next was seen, and the last not until October 8. Mr. Simpson notes that a few came in on April 26, 1902, with the big storm. Other dates are May 21, 1894 (Bacon); May 9, 20, and September 16, 1875 (Sennett).

[*Dendroica kirtlandii*. KIRTLAND'S WARBLER.

One of the very rarest of the warblers, which should, however, occur at Erie, if anywhere in Pennsylvania. Cleveland, Ohio, is the type locality, and there are numerous Ohio and Michigan records. It has within the last year been found breeding in northern Michigan. (See Wood, *Bulletin Michigan Ornithological Club*, V, 1904, 3-13.)]

203. *Dendroica vigorsii*. PINE WARBLER.

"Mr. Sennett has observed this bird in the Crawford-Erie district only as a spring and fall migrant." (Warren, *Birds of Pennsylvania*, 1890, 291.) This statement is borne out by two specific records. Mr. Bacon shot one specimen April 28, 1892, and on April 24, 1900, we secured a single bird in the high woods north of Long Pond. It seems to be rare everywhere in western Pennsylvania where there are no tracts of its favorite red or yellow pines.

204. *Dendroica palmarum*. PALM WARBLER.

Rather common on the Peninsula in 1900 as a spring and fall transient, frequenting the shrubbery, low bushes in open places, and even the margins of the ponds, strikingly resembling certain species of sparrows in its habits. It came on April 30, was common for a few days only, and disappeared May 7. In the fall migration it was present for a much longer period—September 4 to October 4, and possibly still later. Mr. Bacon observed it in 1891 from May 1 to 12, and two specimens dated September 30, 1888, are in Mr. Sennett's series.

[*Dendroica discolor*. PRAIRIE WARBLER.

"In Erie and Crawford Counties Mr. Sennett has found the Prairie Warbler as a rare spring and autumnal visitor." (Warren, *Birds of Pennsylvania*, 1890, 293). This statement, although in all probability true, is too indeterminate as to the exact locality to be admitted here, especially as it is unsupported by specimens. Dr. Kirtland states that this species breeds regularly in the vicinity of Cleveland (*American Journal Science and Arts*, Second Series, XIII, 1852, 218), and Audubon gives Lake Erie as its northern limit in the interior (*Ornithological Biography*, II, 1834, 68). It is a rare species in western Pennsylvania.]

205. *Seiurus aurocapillus*. GOLDEN-CROWNED THRUSH.

A summer resident in this general region, but strangely enough not recorded as such on the Peninsula, where it was met with on but two occasions in 1900, May 14 and October 4, a single bird in each case. Mr. Simpson saw two individuals here on April 26, 1902. Mr. Bacon gives it as taken on May 1, 1894, May 4, 1892, and September 15, 1891.

206. *Seiurus noveboracensis*. WATER-THRUSH.

The arrival of this species was noted in 1900 on May 8, one being seen at the mouth of Mill Creek. A few days later it was observed on the Peninsula, in the dense growth of bushes at the lower end of Ridge Pond, where a specimen was taken May 17. Although at least one

pair seemed to be settled here for the season, the species is known to migrate so late that further data are requisite to decide its exact seasonal status. In the fall it was observed by us on August 22 and 23, and Mr. Simpson reported it in September, as well as in September of 1902. Mr. Bacon's only specimen was taken May 11, 1894.

207. **Geothlypis agilis.** CONNECTICUT WARBLER.

One of the rare transient visitants, bringing up the rear of the warbler migration in the spring. A bird believed to have been of this species was heard singing in thick undergrowth May 22, 1900, but eluded capture. A specimen was taken in some low brush along the marsh near the western end of the bay on May 25, its song having first attracted attention. May 29 a third individual was met with in a dense growth of bushes along the board-walk, but successfully evaded an attempt at capture which lasted almost two hours, keeping so well concealed that we got but one or two glimpses of it, although within only a few feet, as evidenced by its singing. The song of this warbler is quite loud and clear, and bears a striking resemblance to those of the Mourning and Kentucky Warblers, but has a peculiar explosive quality heard to some extent in the notes of the Canadian Warbler and Water-thrush. It is susceptible of three or four variations, but perfectly distinctive. There are two fall records: a specimen taken at the head of Niagara Pond September 21, and a single bird noted in the bushes along Ridge Pond September 24. Dr. Warren speaks of having taken the species here in September, and that Mr. Sennett considers it an uncommon migrant (*Birds of Pennsylvania*, 1890, 297).

208. **Geothlypis philadelphia.** MOURNING WARBLER.

Occurs as a rare migrant, detected in the spring only. One was noted in the thick woods west of Graveyard Pond on May 22, 1900, but eluded capture. Mr. Sennett's collection contains one female, shot on the Peninsula June 4, 1875—a late spring record.

209. **Geothlypis trichas brachidactyla.** NORTHERN YELLOW-THROAT.

An abundant summer resident on the Peninsula, where it is a characteristic inhabitant of the bushes and shrubbery surrounding the ponds, and it is noted also on the mainland. May 4 was the date of its vernal appearance in 1900, and by May 14 it had become common. It was particularly numerous and conspicuous in the fall, in August and September, leaving by September 27, although a single stray

specimen was taken as late as October 13. Other late fall records are October 1, 1875 (Sennett), and September 27, 1902 (Simpson). In 1893 Mr. Bacon saw it first on May 6, and on June 8, 1892, he found a nest with four eggs.

210. *Icteria virens*. YELLOW-BREASTED CHAT.

Audubon, who landed at Presque Isle late in August, 1824, (*Ornithological Biography*, I, 1831, 182-185), is responsible for the first record of the Yellow-breasted Chat at this locality, as he says that it extends "as far as the borders of Lake Erie in Pennsylvania" (*ibid.*, II, 1834, 223). Although not a few of Audubon's statements have never been confirmed, and some of them are certainly errors, in the present case the correctness of his observations has been demonstrated after a lapse of seventy-five years. The writer found this species June 27, 1899, in a tract of shrubbery at the foot of Yellow Bass Pond, and one was noted near Misery Bay on May 14 in 1900. It is evidently a rare summer resident so far north.

211. *Wilsonia mitrata*. HOODED WARBLER.

The Hooded Warbler was met with May 28 in considerable numbers and to all appearances settled for the season in a tract of rich woodland along the lake front a few miles west of Erie, and a male was secured. This would indicate that it is a not uncommon summer resident in suitable situations on the mainland, although not noted at all on the Peninsula. Mr. Sennett gives it as breeding in Erie County (Warren, *Birds of Pennsylvania*, 1890, 300), and Mr. Bacon had a specimen brought him May 9, 1901, which date probably indicates the time of its vernal arrival.

212. *Wilsonia pusilla*. BLACK-CAPPED WARBLER.

A transient visitant, apparently not common, at least in the spring of 1900, at which season it was detected on but two occasions, May 19 and 24. Upon its return in the fall it was first noted August 30, and occasionally thereafter until September 21. It was always met with low down, in bushes or thick shrubbery. May 25, 1889, is the date of the only specimen of this species in Mr. Sennett's collection.

213. *Wilsonia canadensis*. CANADIAN WARBLER.

Another transient species, not very common, having been found from May 17 to 24, 1900, frequenting shrubbery. Mr. Bacon records one specimen taken May 18, 1893, and Mr. Simpson mentions having met with it in September, 1900, although it was not observed by us at that season.

214. *Setophaga ruticilla*. AMERICAN REDSTART.

Common as a summer resident in the wooded portions of both the mainland and Peninsula. "In 1892 its arrival was noted May 4, and on June 6 of the same year several nests containing eggs were found." (Bacon.) In 1900 the first birds were observed on May 12, and on May 19 a large flight was encountered in the high woods north of Long Pond. May 28 it was found to be very numerous in the woodland along the lake bluff, a few miles west of the city. September 26 was the last date upon which it was recorded in the fall.

215. *Anthus pensilvanicus*. AMERICAN TITLARK.

Fairly common as a transient visitant, especially in the fall. It frequents the muddy flats at the mouth of Mill Creek, the outside beach, or occasionally the shores of the bay. Mr. Bacon has met with it also in certain barren fields at the western end of Erie County. In the season of 1900 May 9 was the date of its observed arrival, May 10 two were seen and secured, and May 12 a small flock was observed passing northward, these notes comprising the full spring record. The fall notes were as follows: first, September 8; common September 13; and last, November 15, with numerous intermediate records. According to Mr. Bacon flocks of at least fifty birds are quite frequently seen, but we did not meet with any so large as this during our stay.

216. *Galeoscoptes carolinensis*. CATBIRD.

Very common as a summer resident, especially on the Peninsula, finding congenial haunts in the tracts of bushes and shrubbery which abound. Mr. Bacon notes its arrival about April 30 (1893) or May 1 (1892). In 1900 the first was seen May 2, and the last one in the fall on October 8.

217. *Toxostoma rufum*. BROWN THRASHER.

Also a summer resident, but not so common as the Catbird, although frequenting the same situations. It makes its appearance the latter part of April (April 28, 1892; April 26, 1893, Bacon), and in the fall of 1900 it was last seen October 6.

218. *Thryothorus ludovicianus*. CAROLINA WREN.

"In 1898, on April 18, 19, and 23, I heard the loud notes of a wren that was new to me, and on the first occasion caught sight of the bird itself. Although I was unable to secure it, there is no doubt that it belonged to this species." The above note, contributed by Mr.

Bacon, is the only record for this relatively southern species so far north in Pennsylvania, and its seasonable status is quite uncertain. Farther east along the lake shore it has been recorded but once, from near Buffalo, N. Y. (Savage, *Auk*, XII, 1895, 314).

219. *Troglodytes aëdon*. HOUSE WREN.

Rather common as a summer resident, not only on the Peninsula, but even in the city itself, where it often nests, while nearly every farmhouse has a pair breeding in its immediate vicinity. On May 30, 1900, a nest with six fresh eggs was found, built in the deserted hole of a woodpecker in a stub close to the board-walk, the shrubbery along which was a favorite haunt of the species at all times during its stay. Its arrival has been observed by Mr. Bacon about the first of May (April 30, 1893; May 3, 1892), and in 1900 October 3 was the latest fall date. Mr. Sennett writes entertainingly (*Auk*, VI, 1889, 76) of a nest found by himself and Dr. B. H. Warren on August 1, 1888, which was built in a kingfisher's hole in a sand-bank, and contained young birds.

220. *Olbiorchilus hiemalis*. WINTER WREN.

Of moderately common occurrence during the spring and fall migrations, and occasionally in winter also. Mr. Bacon has seen it on January 1, February 2 and February 22, 1892. Its first and last recorded occurrences in the spring of 1900 were respectively April 9 and May 10. In the fall it was noted only on October 10 and 11. Mr. Sennett's collection contained examples taken October 27 and 29, 1888.

221. *Cistothorus stellaris*. SHORT-BILLED MARSH WREN.

This comparatively little known species was noted on but one occasion, May 17, 1900, when a single female was shot by Mr. Worthington at the head of Yellow Bass Pond, having been flushed from a growth of low weeds and bushes near the water's edge. It is probably to be set down as a rare summer resident.

222. *Telmatodytes palustris*. LONG-BILLED MARSH WREN.

In the marshes of the Peninsula this interesting species is an abundant summer resident. By the writer it was first met with in June, 1899, about Yellow Bass and Niagara Ponds, when a number of specimens were collected and several new (but empty) nests discovered. In 1900 it was first observed April 30, becoming common May 9. May 23 several unfinished nests were found, and on May 31 a set of six eggs was collected from a nest in Niagara Pond, a favorite haunt

of the species, from the extensive tracts of rushes and marsh grasses in which it delights. It was also encountered in the marshes along the bay shore at the western part of the Peninsula, and at the mouth of Mill Creek, but was not found about Long or Cranberry Ponds, the conditions there not being favorable. During the migrations it is said to occur occasionally on the mainland. October 6 was the latest fall date on record, although it may possibly have stayed somewhat longer. In 1893 it was first seen on May 3 (Bacon).

223. **Certhia familiaris americana.** BROWN CREEPER.

A fairly common migrant in spring and fall, and in all probability a winter resident in small numbers. Mr. Sennett is quoted as saying that it is sometimes seen during mild winters (Warren, *Birds of Pennsylvania*, 1890, 314). It has been found in migration in early April (April 8, 1875, Sennett; April 8, 1893, Bacon), but none were noticed in 1900 until April 18, while on April 24 a flight was encountered in the high woods north of Long Pond. There were dozens of them in the trees, their faint chirps being heard on every hand, and some were even singing. May 7 the last was seen. In the fall September 14 was the first date, and October 16 the last, although the species doubtless remained later, as above intimated.

224. **Sitta carolinensis.** WHITE-BREASTED NUTHATCH.

A permanent resident, well represented at all seasons of the year, frequenting the wooded portions of the mainland and Peninsula, often in company with other species of like haunts and habits.

225. **Sitta canadensis.** RED-BREASTED NUTHATCH.

Fairly common, according to our observations, during the spring migration, less numerous in the fall. April 19, 1900, one was shot on the wooded ridge southeast of the city, but none were noted on the Peninsula until May 2. It was observed as late as May 19, almost justifying the suspicion that it breeds. In the fall it was recorded on September 20, 21, and 26. It was met with in the woodland, often quite low down, and usually accompanied by such birds as kinglets, chickadees, Brown Creepers and warblers. Other observers seem to have found it rather common in the fall. Thus, Dr. Warren mentions having found this species "quite plentiful in October and the early part of November [1889] in Erie county." (*Birds of Pennsylvania*, 1890, 316.) There are specimens in Mr. Sennett's collection taken at intervals from September 22 to October 29, 1888.

226. *Bæolophus bicolor*. TUFTED TITMOUSE.

A rare straggler, wandering northward in the winter from its usual habitat. There are three specimens in Mr. Sennett's collection, two of which are labeled December 18, 1874, the third December 20, 1874 — possibly an error for the earlier date, since it is stated that this was the only occasion upon which the species had been met with here. These were taken, it is said, from a flock of a dozen or more, on the bluff at the head of the bay. Doubtless this occurrence is the basis of the very indefinite statement of Dr. Warren, "This species is seldom seen in Erie county" (*Birds of Pennsylvania*, 1890, 318).

227. *Parus atricapillus*. BLACK-CAPPED CHICKADEE.

A common resident, found in scattered companies except in the nesting season, associated with other species of similar haunts and habits. It was to be met with at all times in the shrubbery along the board-walk, where a nest was discovered in a small dead stub, about five feet from the ground, from which six incubated eggs were secured on May 19, 1900. In the fall it is conspicuous in the van of the flights of warblers.

228. *Regulus satrapa*. GOLDEN-CROWNED KINGLET.

This species doubtless remains through the winter in small numbers, as it was found in both March and November in the sheltered woodland of the interior of the Peninsula. During the migrations it is very numerous, the spring flights occurring (in 1900) from April 17 to 30. In the fall the first was seen September 25, and it became common in October, resuming its winter numbers the latter part of that month. September 29, 1888, is the earliest fall record afforded by Mr. Sennett's series.

229. *Regulus calendula*. RUBY-CROWNED KINGLET.

A spring and fall transient visitor, quite common, according to our experience in 1900. It was recorded first in the spring on April 21, and was last seen May 12. In the fall its migratory movement lasted a full month, from September 18 to October 18. It was very often found in company with the Golden-crowned Kinglet, and associated with warblers of various kinds. It was in full song upon its arrival in the spring. An additional fall record is September 22, 1888 (Sennett).

230. *Poliophtila cærulea*. BLUE-GRAY GNATCATCHER.

The status of this species here is uncertain. The only record is of an individual seen and secured on August 25, 1900. It is not known to breed so far north in Pennsylvania, and the bird taken may have been migrating, and strayed out of its range.

231. *Hylocichla mustelina*. WOOD THRUSH.

Common, according to Mr. Bacon, as a summer resident, and the best known of the small thrushes. This observation, however, must refer to the mainland only, as we did not find the species on the Peninsula at all, and our only record is of several seen May 28 in woodland along the lake shore bluff, a few miles west of the city limits.

232. *Hylocichla fuscescens*. WILSON'S THRUSH.

Occurs as a moderately common summer resident, frequenting the woodland and shrubbery, particularly along the board-walk. Its arrival was noted May 10, 1900, and on May 26 a nest with four fresh eggs was discovered, built on the ground in the woods, in an open place among the dry leaves. May 11, 1875, is the date of the only specimen in Mr. Sennett's collection.

233. *Hylocichla aliciæ*. GRAY-CHEEKED THRUSH.

This species was found to be of common occurrence as a migrant in the fall of 1900, arriving September 18, and at once becoming numerous, vying in abundance with the Olive-backed Thrush, with which it was closely associated during its stay. Although the two species are so similar in coloration, haunts, and habits, the Gray-cheeked may always be readily distinguished from the other by its call-note, which is more prolonged, quite different from the short, low "chuck" of the Olive-backed. In addition it was often heard to offer a variety of other notes, perhaps snatches from its song, which greatly resembled those of the Wilson's Thrush. By the end of September the present species had diminished in numbers, and by October 6 the last had gone. The only spring record is afforded by a specimen in Mr. Sennett's collection, taken May 13, 1875.

234. *Hylocichla ustulata swainsonii*. OLIVE-BACKED THRUSH.

A transient visitant, only tolerably common in the spring, but much more so in the fall, according to our experience in 1900. May 17 marked its vernal appearance, and May 26 its departure. During this interval it was frequently heard singing. In the fall the earliest and latest dates were respectively September 18 and October 3, thus coincid-

ing closely with the migration period of the last species. It was particularly numerous in the shrubbery along the board-walk. Mr. Sennett took specimens of this thrush on May 21, 1875, and September 21, 1889; Mr. Bacon secured one September 21, 1901.

235. *Hylocichla guttata pallasii*. HERMIT THRUSH.

The Hermit Thrush occurs as a transient visitant only, apparently uncommon in the spring, but quite plentiful in the fall. It migrates earlier in the spring and later in the fall than the other thrushes. April 11, 1875, the date of a specimen in Mr. Sennett's collection, seems to be the earliest spring record available. Mr. Simpson saw several April 26, 1902. Mr. Bacon has secured specimens April 29, 1892, April 30, 1893, and May 2, 1891—the latest spring date. A specimen taken April 24, in deep woods north of Long Pond, was the only specimen noted in 1900. In the fall it arrived and was common on October 3, when the Gray-cheeked and Olive-backed Thrushes were leaving, and remained at least until October 20. At this season it was found mostly in dense covert of bushes and evergreens, usually in scattering companies, silent save for a low call-note. October 7, 1894 (Bacon), and October 26, 1889 (Sennett), are additional fall records.

236. *Merula migratoria*. ROBIN.

This abundant and familiar bird is a summer resident on both the mainland and Peninsula. Mr. Bacon states that an occasional individual remains through the winter, but that it ordinarily arrives the second week in March, sometimes a little later, March 9, 1892, being the earliest record. Although it was already present in numbers the latter part of March, 1900, when our observations began, it was observed in flocks, evidently migrating, as late as April 19. In the fall a small party was seen November 7, this being its last recorded occurrence of the season, although it has been noted by Mr. Bacon as late as November 29 (1894). Such birds as stay through the winter are generally seen about mountain-ash trees, the berries of which furnish an unfailing food supply (S. E. Bacon], *Oölogist*, Albion, N. Y., V, 1888, 60).

237. *Sialia sialis*. BLUEBIRD.

"A summer resident, common, although never so numerous as the Robin, and never known to stay through the winter. I have noted it as early as February 22 (1888), but it usually arrives a little later,

about March 5 or 10. In the spring of 1895, however, which was memorable for the scarcity of Bluebirds throughout the country, the first was not noted until April 11, while up to May 25 but two pairs had been observed in all. The species has recovered its normal abundance since then, however." (Bacon.) In the spring of 1900 it was already present March 22, and doubtless arrived some time previously. Although repeatedly seen on the Peninsula, it is very doubtful if it breeds there, as it was never observed under circumstances that would justify such a belief.

BIBLIOGRAPHY.

The following list embraces the titles of only such papers and publications as contain information specifically stated to refer to the avifauna of this particular locality. Several articles have been published in the last few years which contain references to specimens in Mr. Sennett's collection, but unless it is definitely indicated that such specimens came from Erie the titles have been ruled out. Moreover, all papers have been excluded which merely quote or refer to notes originally published elsewhere. Very possibly some notes of more or less value, published in sportsmen's journals, etc., have escaped notice.

1834. AUDUBON, JOHN JAMES, *Ornithological Biography*, Volume II, Edinburgh, 1834.

Reference is made on page 223 to the occurrence of *Icteria virens* on the Pennsylvania shore of Lake Erie (see page 587).

1887. "A. A. A." The Snowy Owl in Erie County, Pa.—*Forest and Stream*, XXVIII, February 3, 1887, 24.

1888. B[ACON], S[AMUEL] E. [Notes on the Robin and English Sparrow at Erie, Pa.]—*Oölogist*, Albion, N. Y., V, 1888, 60.

1888. WARREN, B. H. *Report on the Birds of Pennsylvania*. Harrisburg, 1888, pp. 260.

The appendix (pages 229–249) contains a number of references to Erie County birds inserted on the authority of Mr. George B. Sennett.

1888. BACON, SAM[UEL] E. [Notes from Erie, Pa.]—*Oölogist*, Albion, N. Y., VI, 1889, 134.

1889. DWIGHT, JONATHAN, JR., Recording Secretary. [Abstract of Proceedings of the] Linnæan Society of New York.—*Auk*, VI, 1889, 196–204.

On page 198 four species of birds are stated to have been found at Erie by Mr. George B. Sennett—*Sterna* "*tschegrava*," "*Octocoris*" (sic) *alpestris praticola*, *Lanius ludovicianus* (*migrans*), and "*Ammodramys*" *savannarum passerinus*.

1889. SENNETT, GEORGE B. *Troglodytes ædon*, House Wren, Breeding in a Sand Bank.—*Auk*, VI, 1889, 76. See page 589.
1890. DWIGHT, JONATHAN, JR. The Horned Larks of North America.—*Auk*, VII, 1890, 138-158.
Specimens from Erie in Mr. Sennett's series are mentioned on pages 142 and 145.
1890. SENNETT, GEORGE B. The King Eider (*Somateria spectabilis*) at Erie, Pennsylvania.—*Auk*, VII, 1890, 88-89.
1890. [MERRIAM, C. HART, Secretary]? Seventh Congress of the American Ornithologists' Union.—*Auk*, VII, 1890, 66-71.
"He [Mr. George B. Sennett] also called attention to a peculiar, dark-colored, and otherwise abnormal specimen of the Carolina Rail taken at Erie, Pennsylvania." (Page 71.)
1890. WARREN, B. H. Notes on Pennsylvania Birds.—*Forest and Stream*, XXXIV, February 13, 1890, 64.
"*Plectrophenax*" *nivalis* and *Calcarius lapponicus* at Erie, Pa., October and November, 1889.
1890. WARREN, B. H. *Report on the Birds of Pennsylvania*, Second Edition, Revised and Augmented. Harrisburg, 1890, pp. 434.
Scattered through the pages of this report are many notes on Erie birds inserted on the authority of Mr. George B. Sennett. As Mr. Sennett's original manuscripts were consumed with the rest of Dr. Warren's papers in the Capitol fire at Harrisburg in 1897, it is impossible to verify the references, some of which are unsupported by specimens in Mr. Sennett's collection, while others are too indefinite as to the exact locality meant to be utilized in the preparation of the present paper. However, as Mr. Sennett was known to be a careful observer, there would seem to be no good reason for discrediting his records published at second-hand, all other things being equal, and hence they have been taken at their face value, except as above mentioned. A few species have been included in the present list on the authority of these records alone, as specifically stated in every case.
1892. BACON, SAMUEL E. Old Squaw (*Clangula hiemalis*).—*Ornithologist and Oölogist*, XVII, 1892, 45. Quoted in full on page 524.
1892. CHAPMAN, FRANK M. A Preliminary Study of the Grackles of the Subgenus *Quiscalus*.—*Bulletin American Museum of Natural History*, IV, 1892, 1-20.
Contains several references to Mr. Sennett's Erie specimens of *Quiscalus quiscula æneus*.
1899. RHODES, SAMUEL N. Notes on Some of the Rarer Birds of Western Pennsylvania.—*Auk*, XVI, 1899, 308-313.
Two specimens of *Ectopistes migratorius* from Erie County mentioned (page 310) as having been presented to the Carnegie Museum by Mr. George B. Sennett.
1900. CHAPMAN, FRANK M. A Study of the Genus *Sturnella*.—*Bulletin American Museum of Natural History*, XIII, December 31, 1900, 297-320.
Three specimens of *Sturnella magna* from Erie, Pa., listed.

1902. OBERHOLSER, HARRY C. A Review of the Larks of the genus *Otocoris*.—*Proceedings United States National Museum*, XXIV, 1902, 801-884.
Specimens of *Otocoris alpestris praticola* from Erie (in the Biological Survey series, collected by Samuel E. Bacon), are mentioned on page 828.

ADDENDA AND CORRIGENDA.

Since page-proof of the present paper has reached the author there has been published the "Thirteenth Supplement to the American Ornithologists' Union Check-List of North American Birds" (*Auk*, XXI, 1904, 411-424), wherein a number of the nomenclatural changes used by the writer are formally adopted, rendering the citation of references unnecessary in such cases.

Attention is also called to the following corrections and additions, noted too late for insertion in their proper places:

Page 494, 13th line from the top, insert asterisk before *Porzana carolina*.

Page 494, 5th line from bottom, for *Colaptes auratus* read *Colaptes auratus luteus*.

Page 502, under *Stercorarius parasiticus*, add: Mr. Bacon has informed the writer that on May 22, 1904, he observed a bird which he believed to have been of this species. "It was a handsome, spirited bird, falcon-like in its movements, and when noted was pursuing a Common Tern." The occurrence of this species so late in the season is indeed remarkable.

CARNEGIE MUSEUM,
July 14, 1904.



JOHN BELL HATCHER.

Born Oct. 11, 1861; Died July 3, 1904.

In Memoriam.

JOHN BELL HATCHER.

It becomes the mournful duty of the editor of the Annals to record the death, on July 3, 1904, of his beloved and trusted associate, Mr. John Bell Hatcher.

Mr. Hatcher was born at Cooperstown, Brown County, Illinois, on October the 11th, 1861. He was the son of John and Margaret C. Hatcher. The family is Virginian in extraction. In his boyhood his parents removed to Greene County, Iowa, where his father, who with his mother survive him, engaged in agricultural pursuits near the town of Cooper. He received his early education from his father, who in the winter months combined the work of teaching in the schools with labor upon his farm. He also attended the public schools of the neighborhood. In the fall of 1880 he entered Grinnell College, Iowa, where he remained for a short time, and then went to Yale College, where he took the degree of Bachelor in Philosophy, in July, 1884. While a student at Yale his natural fondness for scientific pursuits asserted itself strongly, and he attracted the attention of the late Professor Othniel C. Marsh, the celebrated paleontologist, who was at that time the paleontologist of the United States Geological Survey. Professor Marsh, as soon as the young man had received his diploma, commissioned him to undertake a paleontological investigation in southwestern Nebraska. On his way to his appointed field of labor he spent but two days and a night with his parents. Although he had not revisited his home for three years, and was urged to stay longer, he refused to do so, being filled with the highest enthusiasm for the work to which he had been called. This incident at the very outset of his career casts light upon his character and his subsequent activities, in which, though full of the warmest affection for those who were bound to him by ties of blood and friendship, he never allowed personal pleasure, or comfort, or even the gratification of the most innocent instincts of the heart, to

stand in the way of what he conceived to be his calling. From the summer of 1884 until the year 1893 he was continuously in the employment of Professor Marsh. During these years he conducted explorations sometimes alone, sometimes accompanied by others, over a wide area in the States of Nebraska, the Dakotas, Montana, Utah, Wyoming, and Colorado. These expeditions to the western country, which usually began early in the spring, continued until late in the fall, or even into the early winter. He also collected in the winter months and early spring in Maryland, and North Carolina. His success as a collector was phenomenal, and the scientific treasures which he unearthed greatly enriched the collections of the United States Geological Survey and of the Peabody Museum in New Haven. It was upon the collections of vertebrate fossils made by Mr. Hatcher that Professor Othniel C. Marsh based to a very large extent many of his most important papers, and to Mr. Hatcher more than to any other man is due the discovery and collection of the *Ceratopsia*, perhaps the most striking of all the extinct reptilia. Very little had been known about them, and before Hatcher succeeded in discovering a large number of skulls and skeletons they were at best represented by a few fragments, the nature of which was hardly understood even by the most advanced students. At the time of his lamented death Prof. Marsh was engaged in preparing a monograph upon this material, and it fell to his distinguished student, who had discovered these colossal creatures, to take up in 1902 the work which Professor Marsh had left unfinished, and it was to this work that he was devoting himself when the hand of death cut him off, as it had some years before removed his revered and distinguished master.

In 1890 Mr. Hatcher was made Assistant to the chair of Geology in Yale University. In 1893 he was elected Curator of Vertebrate Paleontology and Assistant to the chair of Geology in the College of New Jersey at Princeton.

While at Princeton he continued his geological and paleontological explorations in the Western States with his usual enthusiasm and success. For many years he had cherished the wish to undertake the exploration from a geological and paleontological standpoint of Patagonia and Terra del Fuego. He finally undertook the collection of a fund to enable him to carry out his purpose.

Generous subscriptions were made by a number of the alumni and friends of Princeton University, and he himself out of his small savings contributed a large portion of what proved to be required to undertake the work. His plans were thoroughly approved and enthusiastically supported by Professor W. B. Scott, the Professor of Geology in Princeton. Three expeditions were made. The first extended from March the 1st, 1896, to July the 16th, 1897. On this expedition Mr. Hatcher was accompanied by his brother-in-law, Mr. O. A. Peterson, as an assistant. The second expedition extended from November the 7th, 1897, to November the 9th, 1898. On this expedition Mr. Hatcher was accompanied by Mr. A. E. Colburn as taxidermist. The third expedition was carried on from December the 9th, 1898, to September the 1st, 1899, when again Mr. O. A. Peterson accompanied Mr. Hatcher as his assistant. The story of these expeditions has been published in the first volume of the Reports of the Princeton University Expeditions to Patagonia, which are being issued under the editorial supervision of Professor William B. Scott upon the J. Pierpont Morgan Publication Fund of Princeton University, the fund having been generously given by Mr. Morgan in order that the scientific information secured by Mr. Hatcher might be made known to the world. In the conduct of these expeditions Mr. Hatcher strikingly revealed not only his great scientific insight, but his undaunted courage and great tenacity of purpose. Twice he came near losing his life, once as the result of a singular accident which befell him while taking a lonely ride across the pampas, once while confined to his tent amidst the deep snows of winter by a violent attack of inflammatory rheumatism, during which his solitary companion ministered to him as well as he could, at one time hourly expecting that the life of the intrepid explorer was about to end. Fortunately he recovered, but the terrible sickness through which he had passed left its impress upon him ever afterwards, although he was never willing to admit, even when suffering intense pain, that he was other than strong and capable of enduring hardships as in former days.

The results of Mr. Hatcher's explorations in Patagonia were of the most important character. The collections of vertebrate fossils made by him and his assistants, and now preserved at Princeton University, are enormous in extent and of the very highest scientific

value. Some of these collections were made by him at great personal risk, the strata in which they were found being only exposed for a few hours at low tide on the margin of the ocean. Working rapidly he and his assistant took up what they could, and then hurried back over the wide beach to the cliffs, to presently see the water from fifty to sixty feet deep rolling over the spot where they had been at labor. The explorers literally snatched their treasures from the hungry jaws of the ocean. In the fields of recent zoölogy and botany he made extensive collections. His geographical discoveries were of great importance. He added immensely to our knowledge of the interior of Patagonia, traversing vast territories upon which civilized man had never before planted foot. He discovered mountains and lakes, and traced the course of rivers which had never before been mapped. One of the great mountain ranges by the consent of both the Argentine and Chilean governments bears his name. His decision that the crest of the Patagonian watershed in parts of its course lies far east of the crest of the southern Andean ranges, had an important bearing upon the question of the boundary line between the Argentine Republic and Chile, and in the arbitration of this question, which has happily been settled without recourse to arms, as was at one time threatened, the discoveries of the young American explorer were brought into prominence in diplomatic circles.

On February the 1st, 1900, Mr. Hatcher accepted the position of Curator of Paleontology and Osteology in the Museum of the Carnegie Institute in Pittsburgh, where his brother-in-law, Mr. O. A. Peterson, immediately after his return from Patagonia, had been employed as an assistant. Installed in his new station, with the assurance of the unqualified and generous support of the founder of the Institute in all wise efforts to make his work successful, he began to lay out in connection with the Director of the Museum plans to create one of the most important paleontological collections in America. For four summers in succession he carried on explorations in the Western States. In 1903 he was associated for a portion of the time with Mr. T. W. Stanton of the United States Geological Survey in an effort to ascertain the relative position and geological age of the Judith River beds, which had been for some time the subject of earnest discussion among geologists. His views

in relation to this subject, which had been opposed by almost every other geologist in America, were finally ascertained to be correct, and it was a matter of great personal gratification to him, as the writer of these lines knows, that the accuracy of his observations and of his conclusions, which had been reached many years before, had been verified.

While professor Hatcher wrote very little in relation to geology, he nevertheless was regarded as being one of the very ablest of American geologists, his great experience in the field and his close attention to the subject having given him a practical knowledge of the subject, such as was possessed by few of his contemporaries. One of the leading geologists in America, in speaking of him said to the writer, "I regard Professor Hatcher as one of the best informed geologists in the United States. He is preëminent in this field, though he sets comparatively small store by his attainments."

The last five years of his life, during which he was connected with the Carnegie Institute, were not only years in which he proved himself remarkably successful as a collector, but in which he revealed his ability as a scientific author. A number of important papers from his pen have appeared in the Annals and Memoirs of the Carnegie Museum. The first volume of the Reports of the Princeton University Expeditions was written by him during this time. He contributed numerous brief articles to various scientific journals, and in 1902 undertook for the United States Geological Survey the completion of the Monograph of the Ceratopsia which had been left unfinished by Professor Marsh at the time of his death. The writer believes that this great work had been brought so far that it will be possible to complete it with comparatively small effort on the part of some one reasonably familiar with the subject. Various other important papers of a monographic character had been begun. Unfortunately these for the most part are not in such condition that they can be published.

One of the great undertakings which had occupied much of his time and thought during the past eighteen months was the reproduction of the skeleton of *Diplodocus carnegii*, a restoration of which had been ordered by Mr. Andrew Carnegie for the purpose of presenting the same to the British Museum of Natural History, the Trustees of which in February, 1903, had formally signified their

acceptance of Mr. Carnegie's kind offer to have such a reproduction made for them. The superintendence of this task was congenial labor to him. On the first day of July, 1904, a small company of scientific men and women, together with the Trustees of the Carnegie Institute and a few other guests, had the pleasure of a private view of this restoration, which had been carefully assembled preliminary to shipment to England. The absence of Professor Hatcher from the little company was feelingly alluded to by many. But none of the party dreamed, although he was known to be seriously ill, that he was even then sinking into the eternal sleep.

Mr. Hatcher's position as a paleontologist was unique. He is universally admitted by those who are most competent to pass judgment, to have been the best and most successful paleontological collector whom America has ever produced. In saying this it may at once be admitted that he was in all probability the most successful collector in his chosen domain who has ever lived. Professor Hatcher and those associated with him under his control during the years of his activity in the field assembled more important vertebrate fossils than have been assembled by any other one man, whose name is known in the records of paleontology. The larger proportion of the choicest vertebrate fossils now in the Peabody Museum at Yale University, in the collection of the United States Geological Survey, in the Museum of Princeton University, and in the Museum of the Carnegie Institute at Pittsburgh were collected by him. To a very large extent the American methods of collecting such remains, which are now universally admitted to be the best methods known, were the product of his experience in the field and of his careful thought. In a letter just received by the writer from Professor Henry Fairfield Osborn, the Paleontologist of the United States Geological Survey, he says, alluding to the death of Professor Hatcher: "I can hardly tell you how shocked and grieved I am. I had often thought of the probability of Hatcher's death while in the field when taking great risks and entirely away from medical and surgical attendance, but of his death at home I had not thought a moment. In his intense enthusiasm for science, and the promotion of geology and paleontology, and the tremendous sacrifices he was prepared to make, and *had made*, he was a truly rare and noble spirit, the sort of man that is vastly appreciated in Eng-

land and in Germany, but I fear very little appreciated in America. His work as a collector was magnificent, probably the greatest on record."

Professor W. B. Scott, in the columns of *Science*, says: "Hatcher may be said to have fairly revolutionized the methods of collecting vertebrate fossils, a work which before his time had been almost wholly in the hands of untrained and unskilful men, but which he converted into a fine art. The exquisitely preserved fossils in American museums, which awaken the admiring envy of European paleontologists, are, to a large extent, directly or indirectly due to Hatcher's energy and skill and to the large minded help and advice as to methods and localities which were always at the service of anyone who chose to ask for them." Testimony of like character as to the great achievements of Professor Hatcher has come from many other sources.

Mr. Hatcher was characterized by most intense devotion to his life work, as has been already pointed out. Underlying his character was an indomitable determination. In childhood he was weak, and his parents had little hope of seeing him live to young manhood. He, however, gradually outgrew the physical weakness of his boyhood, and bent himself with a mighty purpose to the acquisition of knowledge. His aged and venerable father has touchingly described to the writer the lad's determination when he was but a mere boy to amass useful knowledge, patiently sitting for hours poring over his books when his comrades of like age about him were bent upon sports and pastimes. He was an indefatigable student of books and a very keen observer of things. He was fertile in resources. He had great mechanical aptitudes, and succeeded, sometimes when alone, by patient effort in accomplishing apparently impossible tasks in the removal of huge and weighty objects from difficult positions, which would not have been undertaken by others. The writer recalls one or two cases in which he dared great physical risks and even death, when alone, far from human companionship, in extracting large masses from their original position and moving them by a skilful arrangement of levers to points where they could afterwards be taken up. One such instance occurred in the fall of the year 1903, and the writer could not refrain, while admiring the courage and skill displayed, from earnestly

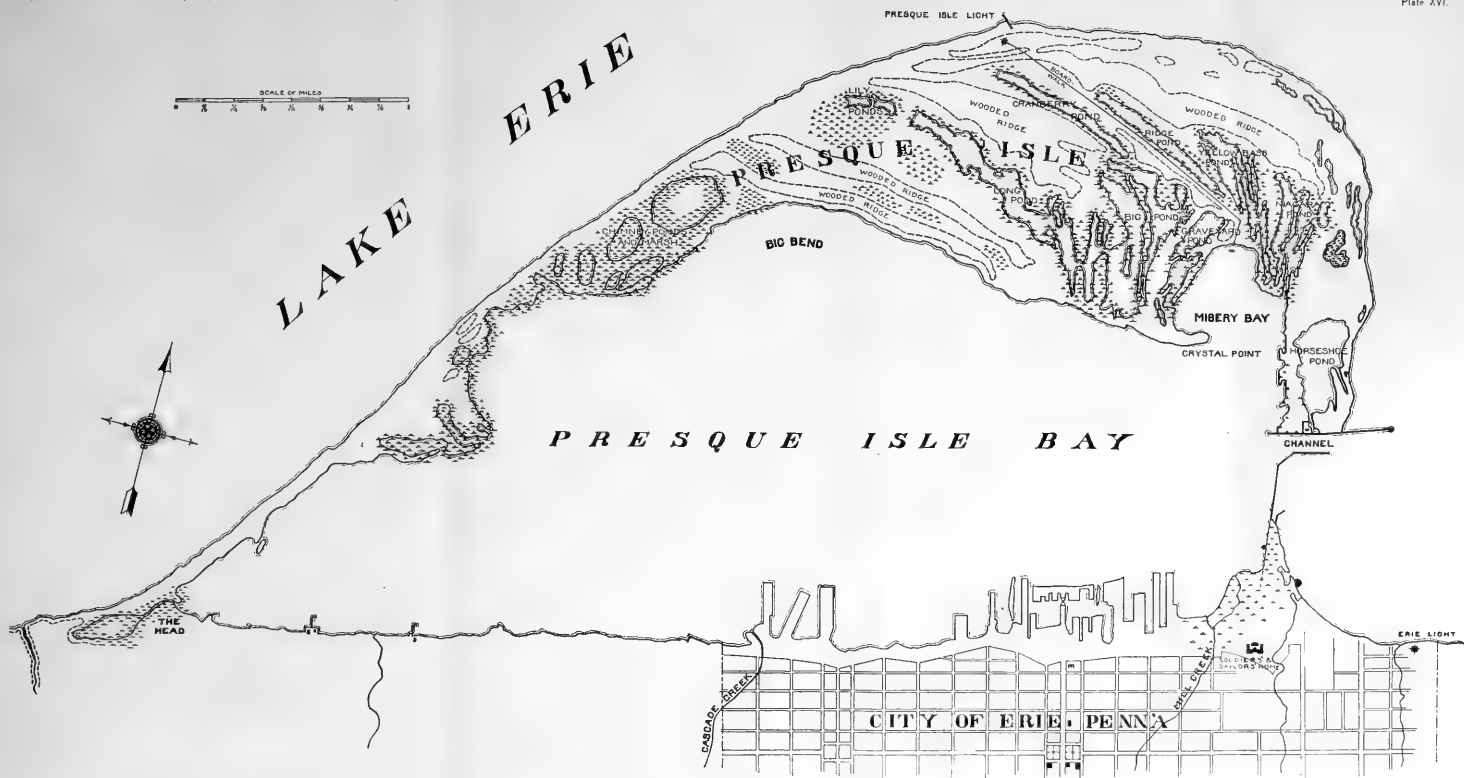
warning Mr. Hatcher against the repetition of such risks as he at that time assumed in attempting to handle a block of rock weighing nearly a ton without the assistance of other men.

While accomplishing a vast amount of most important work during the last five or six years of his life, there was hardly any time in which, as the result of the illness and exposure which he had undergone in Patagonia, he did not suffer pain, and at times pain of a most excruciating character, and yet he was patient and uncomplaining. Painstakingly exact, scrupulously honest, he could not brook carelessness or departure from absolute truthfulness and honesty in others. While full of kindness he was relentless in his opposition to a few by whom he regarded himself as having been deceived.

Perhaps the most striking characteristic of Mr. Hatcher was his extreme modesty. He was always reticent in speaking of what he had done, and shunned publicity, other than that which came to him through his scientific writings. The notoriety which is eagerly courted by some so-called scientific men, and which is acquired by them through a diligent cultivation of the columns of the daily papers, he simply loathed, and he could not be induced, even when urged to do so, to accord an interview to the ordinary representatives of the press. Social life outside of the circle of his home had little charm for him. He even declared himself as happiest when far from men in lonely wilds and face to face with nature in her sternest and grimmest moods. He was, while not a recluse in the strict sense of the word, so deeply absorbed in his researches and studies as to take but little pleasure in the ordinary round of social enjoyments. Nevertheless, he was a most charming companion, and when he could be prevailed upon to unbend and relate the story of his adventures in strange and distant places, the listener found his companionship fascinating.

Though living so much of his life in the wilderness, he was a man of strong domestic attachments. He loved his home, and to none of all the wide circle of his acquaintance does his untimely death bring deeper and more poignant grief than to his wife and four young children. To them the writer renews in these lines his expression of the deepest sympathy.

W. J. HOLLAND.



Map of Presque Isle





Niagara Pond, Presque Isle.



Woodland at Head of Long Pond, Presque Isle.



Big Pond, Presque Isle.

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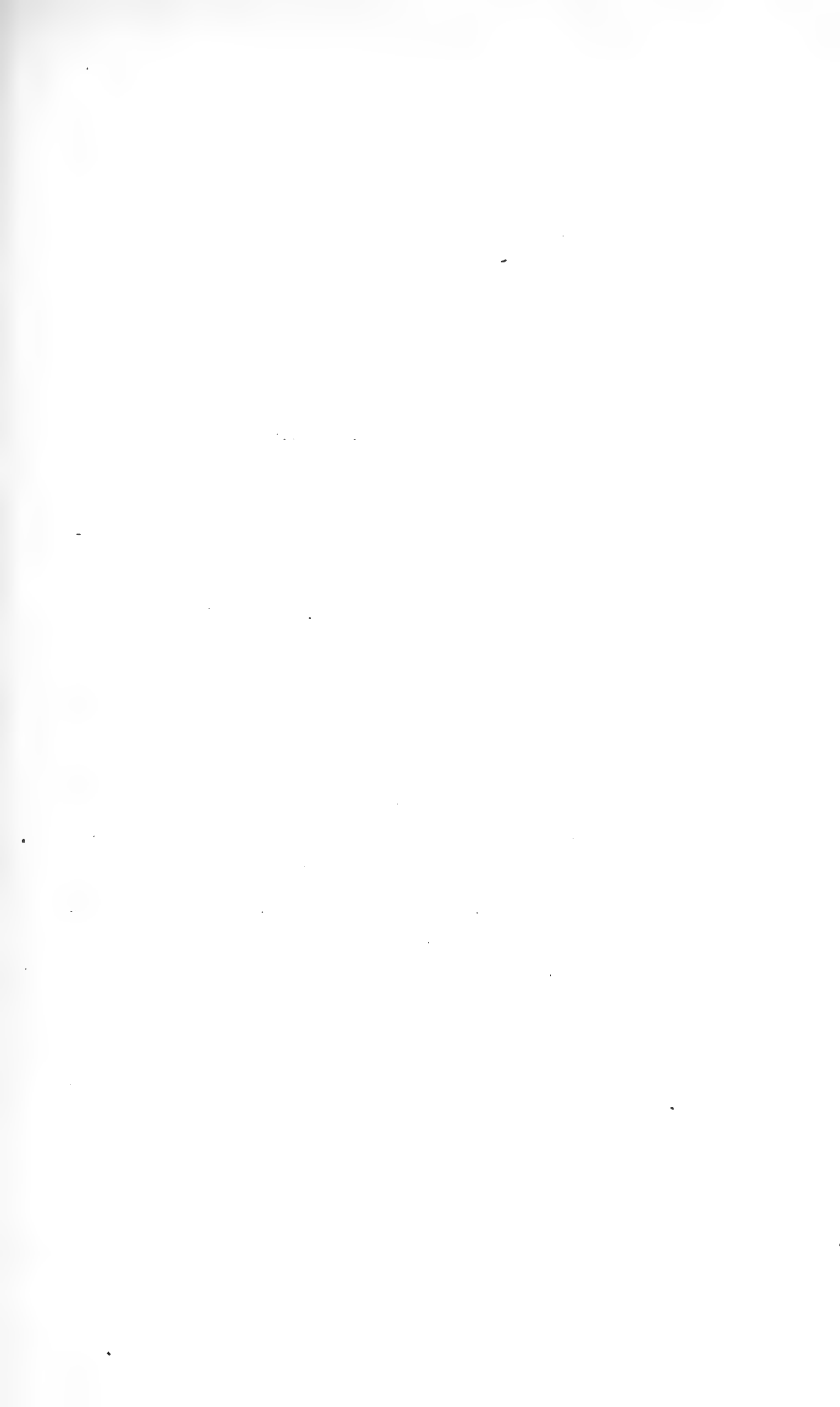


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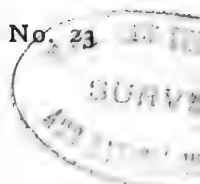


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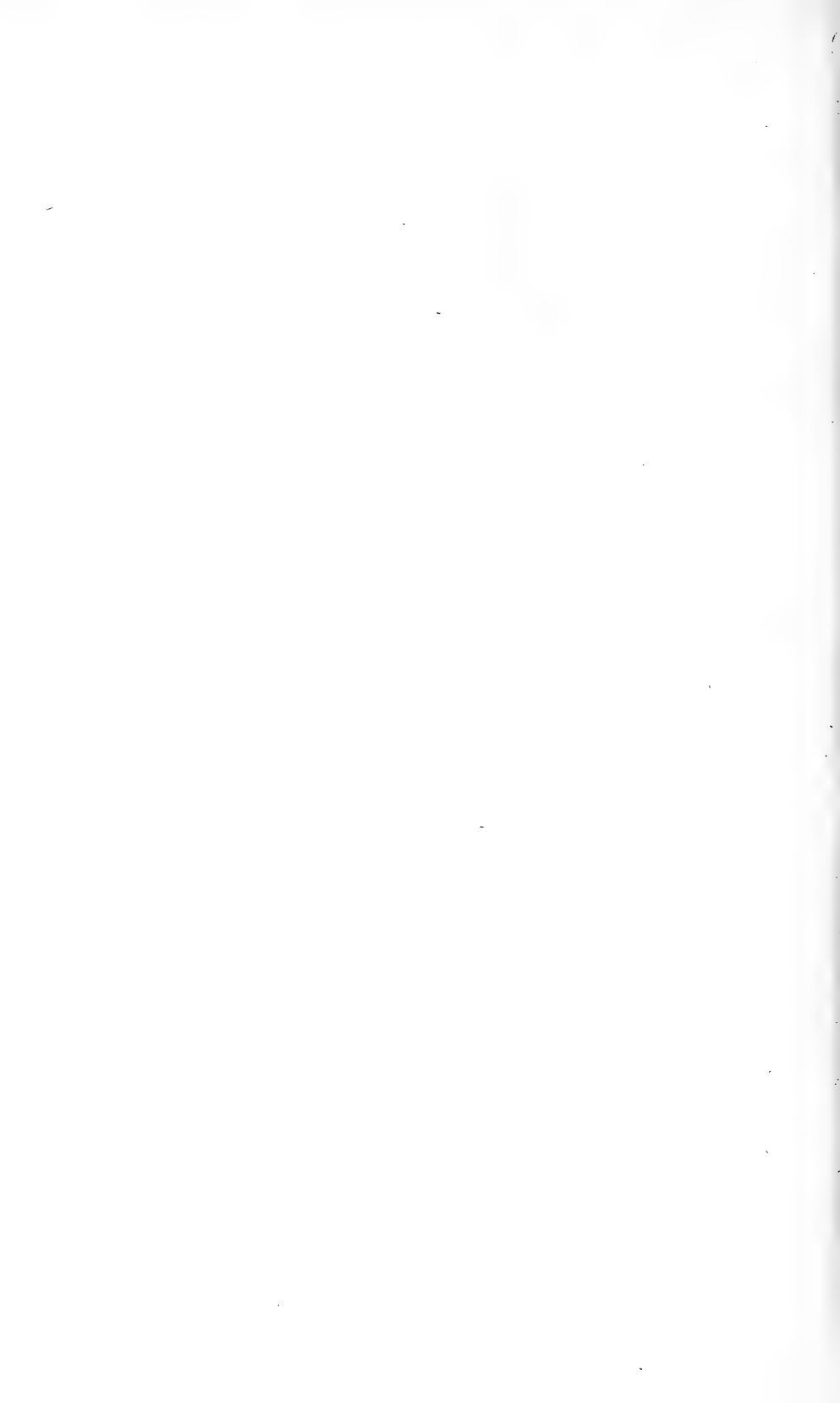
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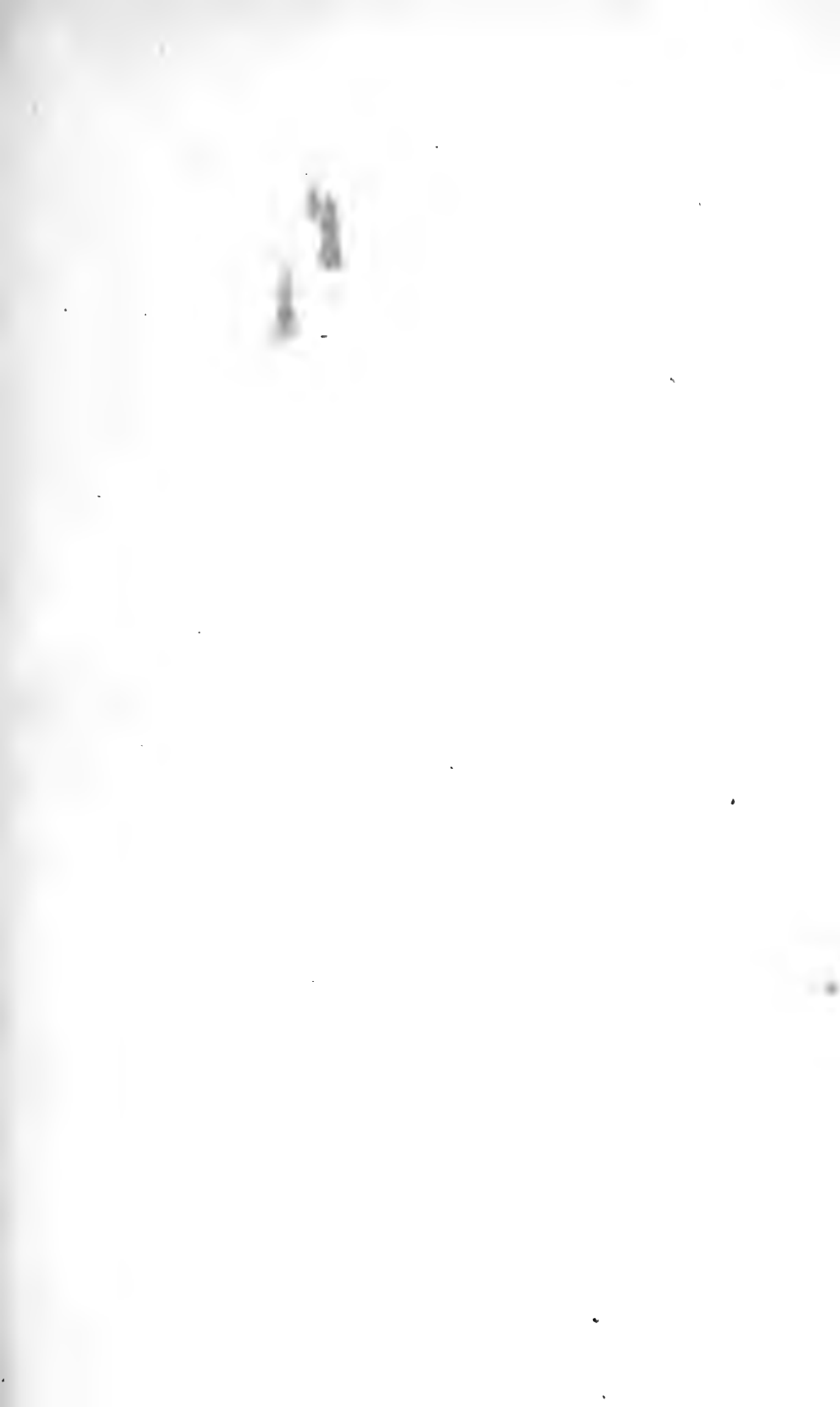
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